



This is a digital copy of a book that was preserved for generations on library shelves before it was carefully scanned by Google as part of a project to make the world's books discoverable online.

It has survived long enough for the copyright to expire and the book to enter the public domain. A public domain book is one that was never subject to copyright or whose legal copyright term has expired. Whether a book is in the public domain may vary country to country. Public domain books are our gateways to the past, representing a wealth of history, culture and knowledge that's often difficult to discover.

Marks, notations and other marginalia present in the original volume will appear in this file - a reminder of this book's long journey from the publisher to a library and finally to you.

### Usage guidelines

Google is proud to partner with libraries to digitize public domain materials and make them widely accessible. Public domain books belong to the public and we are merely their custodians. Nevertheless, this work is expensive, so in order to keep providing this resource, we have taken steps to prevent abuse by commercial parties, including placing technical restrictions on automated querying.

We also ask that you:

- + *Make non-commercial use of the files* We designed Google Book Search for use by individuals, and we request that you use these files for personal, non-commercial purposes.
- + *Refrain from automated querying* Do not send automated queries of any sort to Google's system: If you are conducting research on machine translation, optical character recognition or other areas where access to a large amount of text is helpful, please contact us. We encourage the use of public domain materials for these purposes and may be able to help.
- + *Maintain attribution* The Google "watermark" you see on each file is essential for informing people about this project and helping them find additional materials through Google Book Search. Please do not remove it.
- + *Keep it legal* Whatever your use, remember that you are responsible for ensuring that what you are doing is legal. Do not assume that just because we believe a book is in the public domain for users in the United States, that the work is also in the public domain for users in other countries. Whether a book is still in copyright varies from country to country, and we can't offer guidance on whether any specific use of any specific book is allowed. Please do not assume that a book's appearance in Google Book Search means it can be used in any manner anywhere in the world. Copyright infringement liability can be quite severe.

### About Google Book Search

Google's mission is to organize the world's information and to make it universally accessible and useful. Google Book Search helps readers discover the world's books while helping authors and publishers reach new audiences. You can search through the full text of this book on the web at <http://books.google.com/>

THE STATE OF  
MISSOURI

---

---



58  
me

*Ch. E. Miller.*

This One



57JS-AQW-BY8N

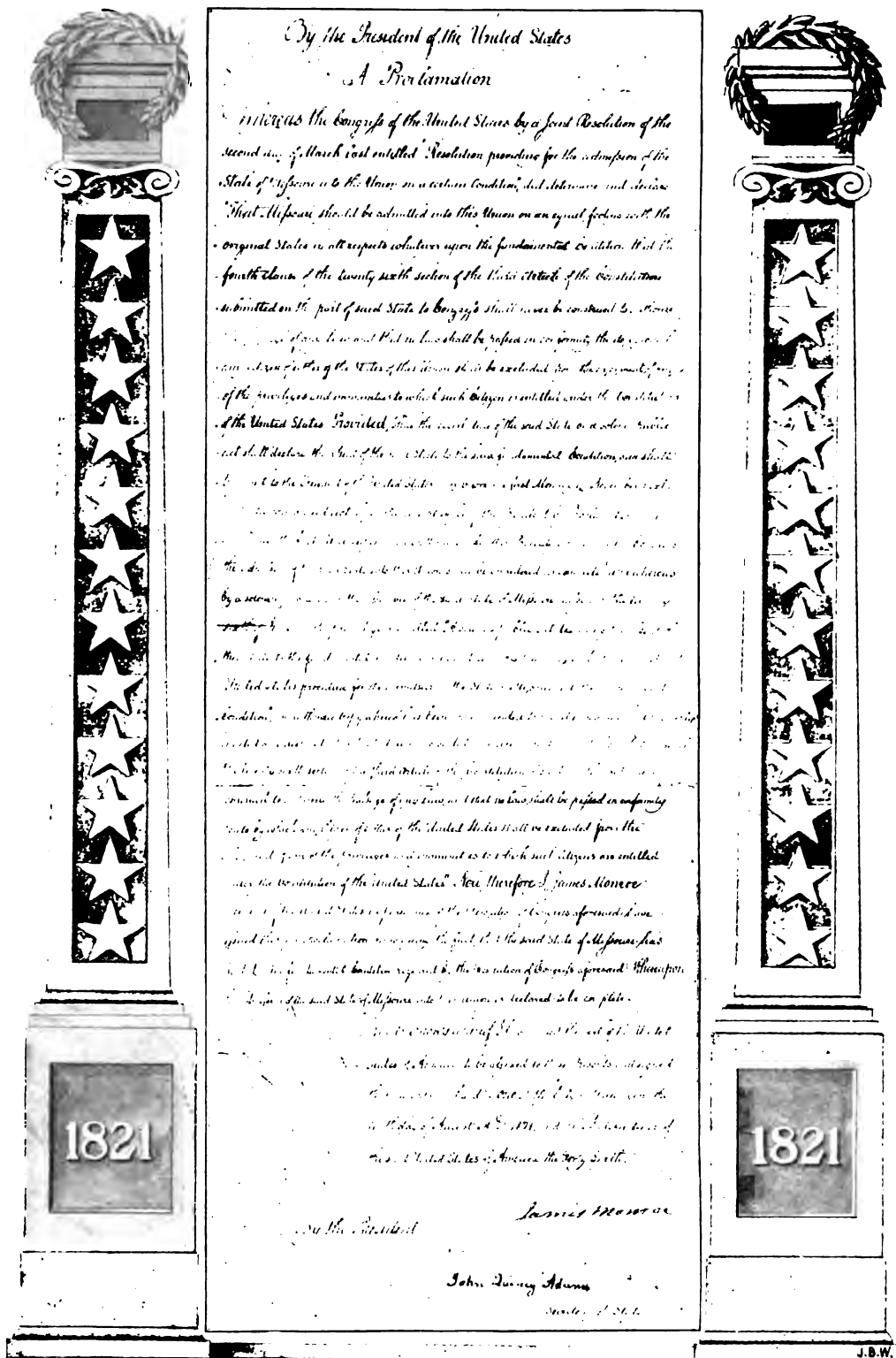








THE STATE OF MISSOURI



PROCLAMATION OF JAMES MONROE, PRESIDENT OF THE UNITED STATES, ADMITTING THE STATE OF MISSOURI TO THE FEDERAL UNION, ISSUED AUGUST 10, 1821. FACSIMILE FROM THE ORIGINAL ON FILE IN OFFICE OF SECRETARY OF STATE, WASHINGTON, D. C.

# THE STATE OF MISSOURI

*AN AUTOBIOGRAPHY*

EDITED FOR

M. T. DAVIS, F. J. MOSS, B. H. BONFOEY, W. H. MARSHALL, J. H.  
HAWTHORNE, J. O. ALLISON, L. F. PARKER, N. H. GENTRY,  
D. P. STROUP, THE MISSOURI COMMISSION TO THE  
LOUISIANA PURCHASE EXPOSITION

BY

WALTER WILLIAMS

"A good land, a land of brooks of water, of fountains and depths that spring out of valleys and hills; a land of wheat and barley and vines; a land wherein thou shalt eat bread without scarceness; thou shalt not lack anything in it."—THE BOOK.



---

1904

---

PRESS OF E. W. STEPHENS, COLUMBIA, MISSOURI, 1904.  
ENGRAVINGS BY MICHAELIS ENGRAVING COMPANY, ST. JOSEPH, MISSOURI

TO  
THOSE WHO ARE  
MISSOURIANS  
AND  
TO  
THOSE WHO  
SHOULD  
BE



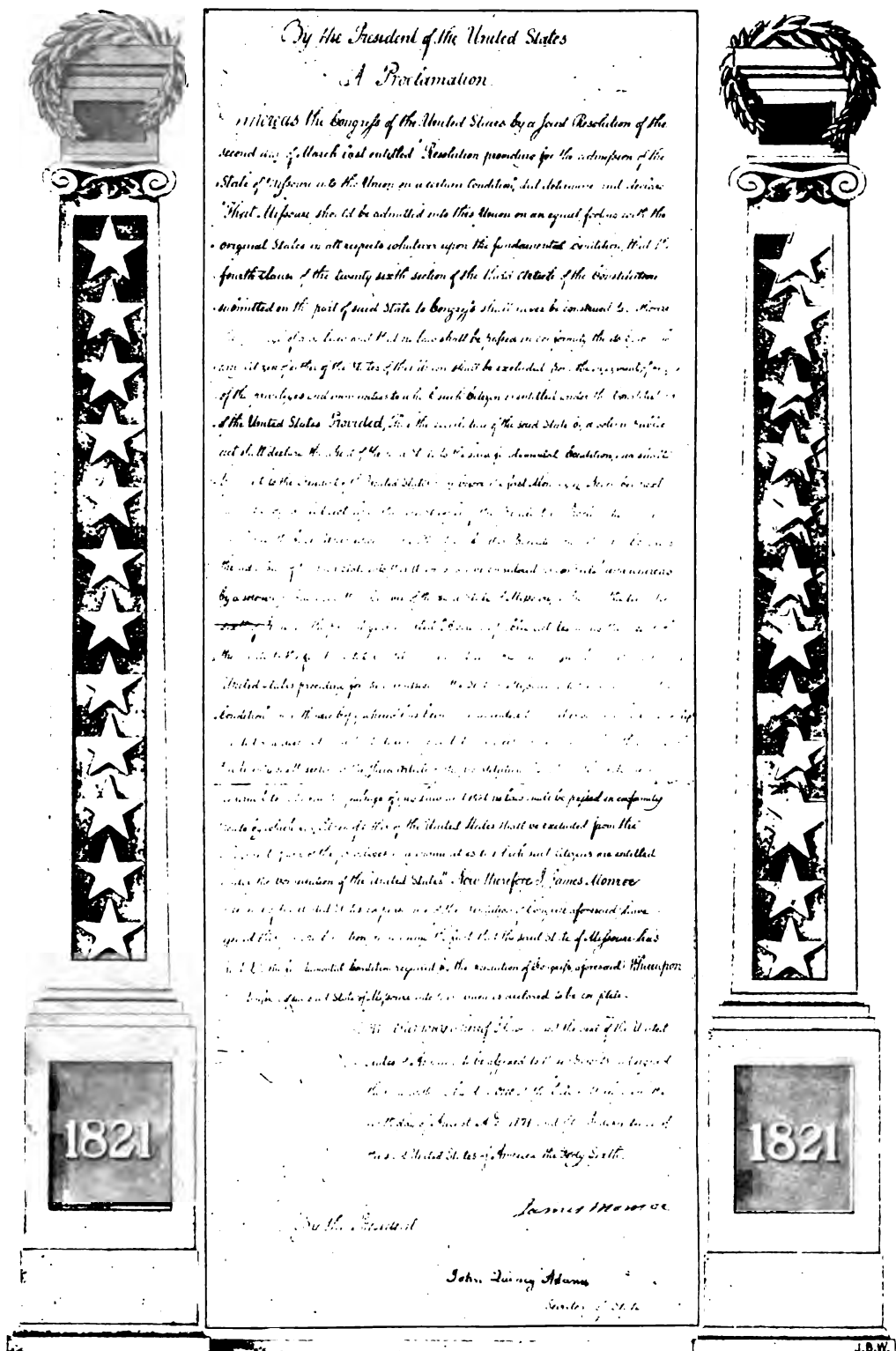


## CHAPTERS THIS BOOK CONTAINS

- I. THE STATE OF MISSOURI.
- II. THE STORY OF THE STATE.  
JONAS VILES, A. M., Ph. D., *Instructor in History, University of Missouri.*
- III. MISSOURI CHRONOLOGY.  
H. E. ROBINSON, *President of State Historical Society of Missouri.*
- IV. HOW THE COMMONWEALTH IS GOVERNED.  
ISIDOR LOEB, LL. B., Ph. D., *Professor of Political Science and Public Law, University of Missouri.*
- V. CLIMATE.  
A. E. HACKETT, *Director Missouri Weather Service.*
- VI. GEOLOGY AND PHYSIOGRAPHY.  
C. F. MARBUT, B. S., A. M., *Professor of Geology, University of Missouri.*
- VII. AGRICULTURE.  
H. J. WATERS, B. S. A., *Dean of the Missouri College of Agriculture and Superintendent of Agriculture, Missouri Commission.*
- VIII. LIVE STOCK.  
F. B. MUMFORD, B. S., M. S., *Acting Dean Missouri Agricultural College and Professor of Animal Husbandry.*
- IX. HORTICULTURE.  
L. A. GOODMAN, *Superintendent of Horticulture, Missouri Commission.*
- X. DAIRYING.  
W. W. MARPLE, *Superintendent of Dairying, Missouri Commission.*
- XI. POULTRY.
- XII. MANUFACTURES AND COMMERCE.  
W. L. THOMAS, *Sometime Editor St. Louis Journal of Commerce.*
- XIII. MINING.  
G. E. LADD, A. B., Ph. D., *Director, School of Mines and Metallurgy, University of Missouri, and Superintendent of Mines and Metallurgy, Missouri Commission.*
- XIV. TRANSPORTATION.
- XV. EDUCATION.  
G. V. BUCHANAN, *Superintendent of Education, Missouri Commission.*



THE STATE OF MISSOURI



PROCLAMATION OF JAMES MONROE, PRESIDENT OF THE UNITED STATES, ADMITTING THE STATE OF MISSOURI TO THE FEDERAL UNION, ISSUED AUGUST 10, 1821. FACSIMILE FROM THE ORIGINAL ON FILE IN OFFICE OF SECRETARY OF STATE, WASHINGTON, D. C.

# THE STATE OF MISSOURI

*AN AUTOBIOGRAPHY*

EDITED FOR

M. T. DAVIS, F. J. MOSS, B. H. BONFOEY, W. H. MARSHALL, J. H.  
HAWTHORNE, J. O. ALLISON, L. F. PARKER, N. H. GENTRY,  
D. P. STROUP, THE MISSOURI COMMISSION TO THE  
LOUISIANA PURCHASE EXPOSITION

BY

WALTER WILLIAMS

"A good land, a land of brooks of water, of fountains and depths that spring out of valleys and hills; a land of wheat and barley and vines; a land wherein thou shalt eat bread without scarceness; thou shalt not lack anything in it."—THE BOOK.



---

1904

---

PRESS OF E. W. STEPHENS, COLUMBIA, MISSOURI, 1904.  
ENGRAVINGS BY MICHAELIS ENGRAVING COMPANY, ST. JOSEPH, MISSOURI

TO  
THOSE WHO ARE  
MISSOURIANS  
AND  
TO  
THOSE WHO  
SHOULD  
BE



MISSOURI  
CHRONOLOGY

1673 Marquette  
and Joliet discov-  
ered the Missouri  
river.

1680 Hennepin  
explored eastern  
Missouri.

1682 La Salle  
named the Mis-  
souri river "St.  
Philip."

1697 French Can-  
adians explored  
Missouri.

**M**ISSOURI was admitted as a territory June 4, 1812. James Madison, President. Act recorded in volume 2, page 743, United States Statutes; the sixth territory to be admitted. Territory covered what is now Arkansas, Missouri, Iowa, Minnesota west of the Mississippi, the Indian Territory, Oklahoma, North and South Dakota, Nebraska, Montana, and most of Kansas, Colorado and Wyoming. Admitted as a state conditionally March 2, 1820, James Monroe, President. Act recorded in volume 3, page 645, of United States Statutes. The thirteenth in order of admission after the original thirteen colonies. Applications made to Congress for a State government March 16, 1818, and December 18, 1818; a bill to admit was defeated in Congress, which was introduced February 15, 1819; application made to Congress for an enabling act December 29, 1819; enabling act (known as the Missouri compromise) passed by Congress March 6, 1820; first State constitution formed July 19, 1820; resolution to admit as a State passed Senate December 12, 1820; rejected by the House February 14, 1821; conditional resolution to admit approved March 2, 1821; condition accepted by the legislature of Missouri and approved by the governor June 26, 1821; by proclamation of the President, formally admitted as a state August 10, 1821; President Monroe's proclamation is recorded in volume 3, appendix No. 2, United States Statutes. A facsimile reproduction appears as frontispiece to this volume.

freedom. The Spanish are remembered by an occasional name of town or river and the French in the same wise or by some ancient family tree. The colonists from east of the Appalachians seeking homes were the real founders of the early State. They builded homes. They constituted a brave, intelligent, patriotic citizenship. They founded a state in the wilderness and equipped it with all the machinery of government a year before the congress of the United States could make up its mind to admit the sturdy youngster to sit full-privileged at the republic's council table. They were of genuine pioneer stock. Some peoples will not bear transplanting; even in the wilder-

ness others are architects of States. Of the latter were the settlers in Missouri, hardy, dominant and daring. Missouri, a very Titan for strength, is the product of their handiwork, while every State from the Father of Waters to the Golden Gate shows their skill in commonwealth-construction. In struggles with savage beast and untamed man the pioneer Missourian showed persistent heroism and hardihood. They were his children who in the strife between the States enlisted to the number of beyond 100,000 in the Union army and more than 50,000 in the Confederate service, keeping the State's quota full, without draft or enforced enlistment, not merely in one but in both armies, a record unexampled among the States north or south. They were church-going and school-encouraging. They had respect for law. No vigilance committee was needed to preserve order even in the most primitive community. In the earliest constitution Missourians recognized the providence of God, provided for the establishment of free schools and planned for a State seminary of learning. One interior county, with population of a scant few hundred, gave, nearly seventy years ago, by subscription, \$117,000 for the founding of a college, a farmer, who could neither read nor write heading the voluntary subscription list with \$3,000, a gift, considering time and circumstance, more princely than that of modern millionaire. It is not strange that with such ancestry, the Missourians of to-day



MISSOURI FARM SCENE.



THE GREAT MISSOURIAN, "OLD BULLION." THIRTY YEARS IN UNITED STATES SENATE. BORN MARCH 14, 1782. DIED APRIL 10, 1858.

should have the largest permanent school fund of any State, give eleven million dollars yearly to education, set apart one-third of the entire state revenue to the support of the public schools, have two per cent more children in school than the average for the United States, more than four per cent fewer illiterates and a church-bell within earshot of every citizen.

The population has had admixture of foreign elements in the more recent years. This admixture has been of thrifty, easily assimilated rather than of thriftless, unhomogeneous kind. Of the foreign-born citizens of Missouri—only 7 per cent of the total population—there are 124,000 Teutons, 27,000 Irish, 14,000 Slavs. In the first State to the eastward, Illinois, where the foreign-born population constitutes 20 per cent of the whole, 385,000 are Teutons, 130,000 Irish and 140,000 Slavs. Seventy per cent of Missouri's population was born in Missouri, a striking commentary as to the value placed upon the State by those who know it best. The population of Missouri has steadily grown. In 1900 it was 149 times as large as in 1810, when the first census of the then territory was taken. During the last ten years the population grew from 2,679,184 to 3,106,665, or 16 per cent. During the present decade there is every indication that it will be augmented by as large or by a larger percentage.

Such a population might well be expected to own their homes. There are, for 3,106,665 people in this State, 646,872 homes. Nor is the expectation contrary to the census facts. In homes owned free of encumbrance Missouri outranks Illinois, Alabama, Maryland, Pennsylvania, Connecticut, Massachusetts, New York, Rhode Island, and New Jersey. Missouri outranks all its neighboring States in farm homes owned free of encumbrance. Texas, Kansas, Illinois, Nebraska, Iowa, each has a larger percentage of mortgage-encumbered farms than Missouri. Missourians are home-builders and home-owners.

This is the people which has made Missouri, a people fearing God and honoring man, of sane not stagnant conservatism, jealous of religious, political and industrial freedom, building home and church and school house, felling the forest, tilling the soil, digging the mine, toiling in factory, and holding to high ideals of citizenship in public and in private life.

These are the handlers of the tools.

But what of the tools with which these architects of the State have worked, of those with which they labor?

#### MISSOURI CHRONOLOGY

1701 French under Count de Frontenac built a fort and started settlements in southeastern Missouri.

1705 French ascended the Missouri river to the mouth of the Kansas river.

1712 Mining privileges in Missouri granted to Anthony Crozat.



FATHER OF THE STATE UNIVERSITY. BORN APRIL 19, 1812. DIED JANUARY 9, 1888.

**MISSOURI  
CHRONOLOGY**

1718 The Mississippi Company established settlements in south-eastern Missouri.

1719 Sieur de Lochon dug lead on the Meramec, M. de la Motte, near Fredericktown and Renault north of Potosi.

Missouri is a State of many interests. Other States lead in one or two industries, Missouri is in front rank in all. The figures are from the census returns of the federal government. Take twenty leading products of the United States and note a group of the six States which excel in each of the twenty. Missouri appears in every one of the twenty groups while the next State appears in only eleven of the groups.

Missouri is an agricultural State. Outside of the three cities of St. Louis, Kansas City, and St. Joseph, only 7.6 per cent of the population live in towns of over 4,000 inhabitants. Farming is the basis of all wealth. Taking Jefferson City, the capital of the State, as a center, within 250 miles is the center of the area of farm values of the United States, the center of the total number of farms, the center of oat production, the center of corn production, the center of wheat production, the center of gross farm income, the center of improved farm acreage, the center of the production of the six leading cereals. One-tenth of the corn grown in the world is grown in Missouri and one-twelfth of the wheat. The per capita production of corn in the United States is 10.8 bushels, in Missouri it is 67 bushels. Canada is a wheat country, yet the State of Missouri grows two-thirds as much wheat as all the province of Canada. The per capita production of all cereals in the United States is 57.1 bushels, in Missouri it is 81.3 bushels. Agriculture is profitable in every Missouri township.

Missouri is a live stock State. It has more live stock farmers than any other State. Its live stock are worth \$200,000,000. The quality of the Missouri

live stock is shown when it is recalled that while in the State are only  $4\frac{1}{2}$  per cent of all the live stock of the United States it represents 5 per cent of the value. It has more finely-bred stock than any other State. The per capita ownership of domestic animals in the United States is \$39, in Missouri it is \$49.06. There is one dairy cow for every five inhabitants of the United States while Missouri has one for every four inhabitants. In poultry Missouri excels by 200 per cent the average production for the United States.

**MISSISSIPPI  
COUNTY  
COURT  
HOUSE.**



Missouri leads in horticulture as in agriculture and live stock. In the laboratory of a university in Germany analysis was made of the finest fruit soils from all the world. The best two specimens were from the loess lands of Missouri. There are a third more apple trees in Missouri than in any other State. Missouri's fruit crop will excel that of any other State. It is the center of the apple, the peach, the berry region of the world. Within its borders are the largest nurseries and the largest orchards known. Its apples are of international reputation. Two bushels of apples for every inhabitant of Missouri is the annual product and four quarts of strawberries. There is no county in the State where fruit is not a paying crop.

Missouri is a mining State. It produces eighty per cent of all the zinc mined in the United States, ninety per cent of all the nickle, and a large per cent of the lead. Half the State is underlaid by coal, a greater extent than in any other State in the federal union. There is estimated to be, at present prices, four hundred billion dollars worth of unmined coal in Missouri. The building stone exceeds that of any other State. Nearly \$700,000,000 worth of mineral wealth has been taken out of the mines of Missouri and the development has hardly begun. Its mineral output exceeds that of California while its yield of lead and zinc alone is greater than the total of the silver product of Colorado.

In manufactures and commerce Missouri is a leading State. Cheap fuel and proximity to great and growing markets will increase the rank of the State in this regard. Three-fifths of its surplus products are consumed at home. The home market is unsurpassed. Transportation facilities are widespread and adequate. Steam railways, electric lines, macadam and dirt roads extend in all directions. In one Missouri county, Jackson, are more macadamized roads than in any other county in the United States.

Diverse industries, an extended crop season and unexampled fertility of soil make, because of the skill, intelligence and energy of the people, a prosperous community. The Missouri river bottom land is like the Nile land for area and richness. The prairies afford abundant harvests. The uplands are unexcelled for fruit. Missouri is an agricultural State, but it supports three cities of over 100,000 people, a larger number than any other State save four. It leads in general agriculture but it also ranks foremost or in the front rank in all other industries. In consequence its people are prosperous. On the first day of May they had on deposit in banks an average of \$136 for every man, woman and child in Missouri, a larger amount than in any neighboring State. There has never been a general crop failure in Missouri. There are no lean years to eat up the years of fatness. Labor has its due. The hours of labor for the average toiler have decreased in a year from 9.5 to



TYPICAL BARN AND SILO—  
CARTHAGE.



A GLIMPSE AT THE STATE UNIVERSITY ACADEMIC  
HALL, CHEMISTRY BUILDING AND MUSEUM.

MISSOURI  
CHRONOLOGY

1720 Spanish expedition from Santa Fe, massacred by the Missouri Indians near Boonville.

1721 Fort Orleans built by M. Burgmont above the mouth of the Osage.

1724 Fort Orleans destroyed and the garrison massacred by the Indians.

9.26 while his wage has grown from \$25.39 to \$27.77. The wealth in home and bank is evidence of material prosperity. The Missourian does not, however, neglect those things that make for the higher life. School, church, the press, are encouraged. The largest circulation in proportion to population of any newspaper in any city in the world is that of a Missouri newspaper in a Missouri town. Massachusetts is properly regarded as a center of literary culture. There are more magazines and other periodicals circulated in proportion to population in Missouri than in Massachusetts and more books used from the public library in Kansas City than in Boston.

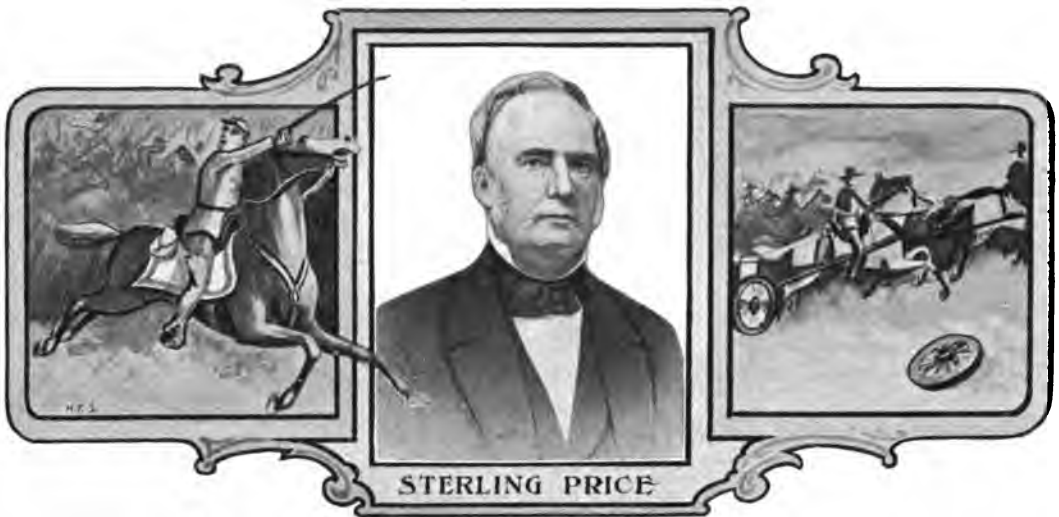
The government of Missouri is well administered. The State has an assessed valuation of \$1,327,962,237, and a tax rate of 17 cents on the \$100. This is the lowest of any State. In 1902 the tax rate in Nebraska was 63 cents, in Kansas 54 cents, in Iowa 40 cents, and in Illinois 40 cents. Despite this phenomenally low tax rate Missouri supports its State institutions liberally. Its laws are enforced, property rights held sacred and administration of State affairs conducted with economy.

Missouri is sometimes called a southern State and again a western State. It is not a southern State nor a western State. Though it extends further south than Virginia, it extends further north than Kansas. Geographically it is at the very center of continental United States. It is politically well-nigh equally divided between the two great parties. Though it has voted with one exception the democratic ticket by varying majorities for twenty-five years, Missouri casts more republican ballots than any other state except New York, Pennsylvania, Ohio, Illinois, and Indiana. Its negro population is small, only 5 per cent of the total. There are more negroes in Topeka, capital of Kansas, than in any Missouri city. The colored population of Missouri is decreasing while it is increasing in Maine, Massachusetts, Connecticut, New York, New Jersey, Pennsylvania, Indiana, Illinois, Minnesota, Iowa, Kansas, Oklahoma, and Arkansas. There are more negroes to the total population in the capital city of any State from Missouri to the Atlantic than are to be found in any Missouri city with a single exception. Though an original slave State, Missouri abolished slavery by its own act, the only State in the American Union so doing. Missouri sent



SUNSET ON THE MISSOURI RIVER AT BOONVILLE.

*Photo by Max Schmidt, Boonville*



GOVERNOR. LEADER OF CONFEDERATE SOLDIERS. BORN  
SEPTEMBER 11, 1809. DIED SEPTEMBER 29, 1867.

more soldiers to the Union army in proportion to population than any of its neighbors and more northern States. It may properly be classed not as a northern or southern, eastern or western, but as a central State, a State in a class to itself with the best qualities of all.

Located between the 36th and 41st parallels of north latitude and between the 89th and 96th meridian of west longitude, Missouri is a part of the temperate zone in which the work of the world is done. Its climate conduces to health and physical strength. The Bureau of Ethnology of the federal government has pointed out that native Missourians are stronger and taller than the native citizens of any other State. The average mean temperature of Missouri, 54 degrees, is higher than the average mean temperature in any State of the same latitude eastward. Health in Missouri is promoted by the pure air and bright sunshine and by the good water with which the state is abundantly supplied. Vital statistics taken from the judicial and carefully compiled figures of the federal census—as are all the figures in this volume where not otherwise expressly stated—make plain that the claim for the health feature of Missouri is not an idle boast. The annual death rate in the United States per thousand population is 16.3 while in Missouri the annual death rate is only 12.2. To express it differently: One-third more deaths occur annually in the other States of the Union in proportion to population than in Missouri. While the annual birth rate in the United States exceeds the annual death rate 11.2 per cent, the excess in Missouri is 13.8 per cent. Missourians are born more numerous and die less rapidly than the citizens of the other States.

If Missouri, which is capable of supporting as large a population in proportion to area as Egypt, equalled that land in population there would be 64,000,000 people in this State instead of less than 3,500,000. God forbid that that time should ever come. Let us always live far enough apart to be neighborly. But there is room enough without crowding for several million more inhabitants of Missouri—and unfeigned welcome! The state is 328 miles in extreme length from north to south and contains 69,415 square miles. Its entire population could be placed, allowing to each a space of six square feet, upon less than a third of a square mile. In area Missouri is slightly larger than England and Wales, which have 32,526,075 population while Missouri has 3,106,665. It is more than four times as large as the mountain republic of Switzerland which has about the same population. There are 588 persons to the square mile in Belgium, 558

#### MISSOURI CHRONOLOGY

1732 The country thrown open by the King of France to all his subjects and the lead mines much developed.

1735 St. Genevieve established.

1762 Francis Burton discovered rich mines at Potosi.

1762 St. Charles established.

MISSOURI  
CHRONOLOGY1762 Louisiana  
ceded to Spain  
by France.1764 St. Louis es-  
tablished by  
Laclede Liguest.1767 Carondelet  
established.1765 St. Ange de  
Bellerive estab-  
lished the capital  
of Upper Louisi-  
ana at St. Louis.

in England, 409 in Holland, and 725.7 in Saxony. In Missouri there are only 45.2 persons to the square mile. The soil of Missouri is capable of yielding varied products more largely than the soil of any country in the world. Here is space and to spare for millions upon millions of intelligent, thrifty, industrious citizens.

Missouri has had an interesting and important history. At least three times within the three-quarters of a century of its life as a sovereign State has it been the central figure of national political affairs swaying the policies of the republic. The great Grecian mathematician asked for a spot upon which to rest the lever with which he would move the world. In Missouri may be found a broad area, filled with every help to material prosperity, blessed with noble citizenship, whose sons and daughters are to aid in moving the world nearer to the ideal of human life. The State has given great men to the nation, the chief product of any State. Four hundred Missourians were asked to name the leaders of the State's thought, the men who had done the most for Missouri and through Missourians for the world. The majority named Thomas Hart Benton, Frank P. Blair, John S. Phelps, B. Gratz Brown, R. P. Bland, Hamilton R. Gamble, James S. Green, and Edward Bates, statesmen; James S. Rollins, the father of the State University; Sterling Price and A. W. Doniphan, soldiers; James B. Eads, engineer; E. M. Marvin, preacher; Eugene Field, poet; and George C. Bingham, artist.

The spirit of Missouri is the spirit of progress, tempered by conservatism. It rejects not the old because of its age, nor refuses the new because it is not old. It is the spirit of a community, conscious of its own secure position, somewhat too careless at times of the world's opinion, hospitable, generous, brave. The dream of the greatest statesman is a nation of useful citizens dwelling in happy homes. In Missouri the dream finds realization.

The noble Latin motto of the State has ever expressed—and does—the spirit of the united citizenship: "Let the welfare of the people be the supreme law." Nobler motto there could not be for commonwealth or citizen. It is the State of Missouri, its autobiography in this volume set down, that bids the wide world welcome.



UNITED STATES SENATOR. LEADER OF UNIONISTS AT OPENING OF WAR.  
BORN FEBRUARY 19, 1821. DIED JULY 8, 1875.





**M**ISSOURI has a unique place among the States of the union; broadly speaking, other States are northern or southern, eastern or western, while Missouri is both western and southern, with much of the energy and conservatism characteristic of the north. This exception to any hard and fast classification should be a source of pride to every Missourian. Other sections have each their distinctive attributes; Missouri to a large degree unites the strong points of all.

The peculiar development of the State is due primarily to her control of the Missouri river. She is the natural gateway to the west and southwest, and the natural meeting place of the two great streams of emigration from the east. Hence her population is of a varied origin, drawn from all sections of the east, and from many European nations. The tremendous natural resources of the State have made her, economically speaking, the most independent in the Union, and for this reason she has maintained her freedom from positive identification with any section. By geographical position and natural wealth Missouri has a place all her own.

The present territory of Missouri was originally part of the French province of Louisiana, but prior to the cession of the western bank of the Mississippi to Spain in 1762, it was almost unexplored and unoccupied. There was one settlement, the oldest in the State, at St. Gene-



MISSOURI  
CHRONOLOGY

vieve; across the river there was a flourishing community of perhaps fifteen hundred Canadians about Kaskaskia and Fort Chartres; the Missouri river and the southeastern portion of the present State had been very imperfectly explored by trappers and miners. The separate history of Missouri begins with the founding of St. Louis in 1764.



HOUSE IN ST. CHARLES WHERE THE FIRST LEGISLATURE MET.

The first house in St. Louis was erected by Pierre Laclede Liguist, of the firm of Maxent, Laclede & Co., merchants of New Orleans, who held a license for the fur trade on the Missouri. After a winter at Fort Chartres, Laclede fixed his trading post at St. Louis in February, 1764. In the following year an English garrison arrived at Fort Chartres and the exodus of the French began. In three years St. Louis was a thriving town of over five hundred inhabitants, the largest settlement in the valley north of New Orleans.

After the Spanish took formal possession

in 1770, that portion of Louisiana north of the Arkansas river was known as the Illinois country and ruled by a succession of Spanish lieutenant-governors at St. Louis. These governors, however, identified themselves with the province; French remained the official language, even of official documents, and the transfer of allegiance brought no break in the continuity of the history of the district. The Spanish lieutenant-governor was an absolute ruler, save for orders from New Orleans; he controlled the troops and militia, acted as chief justice under a code that did not recognize trial by jury, and was quite unrestrained by any popular assembly.

Until the Louisiana Purchase the district had little part in the changes going on about her, and little history beyond the usual chronicles of a frontier settlement.

There was a steady and healthy growth in population, at first of French from Canada, Kaskaskia, or New Orleans, reinforced after 1790 by the Americans from Kentucky, until, at the time of the Purchase, the population of the district was somewhat over six thousand. There were commandants, subordinate to the governor at St. Louis, at New Madrid, St. Genevieve, New Bourbon, St. Charles, and St. Andrews. That is, the towns were strung along the Mississippi south of the Missouri, with two settlements, St. Charles and St. Andrews, near the mouth of the Missouri. New Madrid and Cape Girardeau contained a large number of Kentuckians, but the great majority of the newcomers settled on detached farms along the rivers and creeks between St. Louis and St. Genevieve and about St. Charles. As yet they were content with the toleration freely granted them by the Spanish, and the province, although three-fifths of the white population were of American birth, remained essentially French. The upper Illinois country was primarily an agricultural community, with few distinctions of rank or wealth. The richer men were the merchants, the wholesale dealers or middlemen, who sent the products of the colony to New Orleans or Montreal, and distributed among the people the manufactured goods they received in return.

1770 Pontiac visited St. Louis, and was murdered on the Illinois side of the Mississippi.

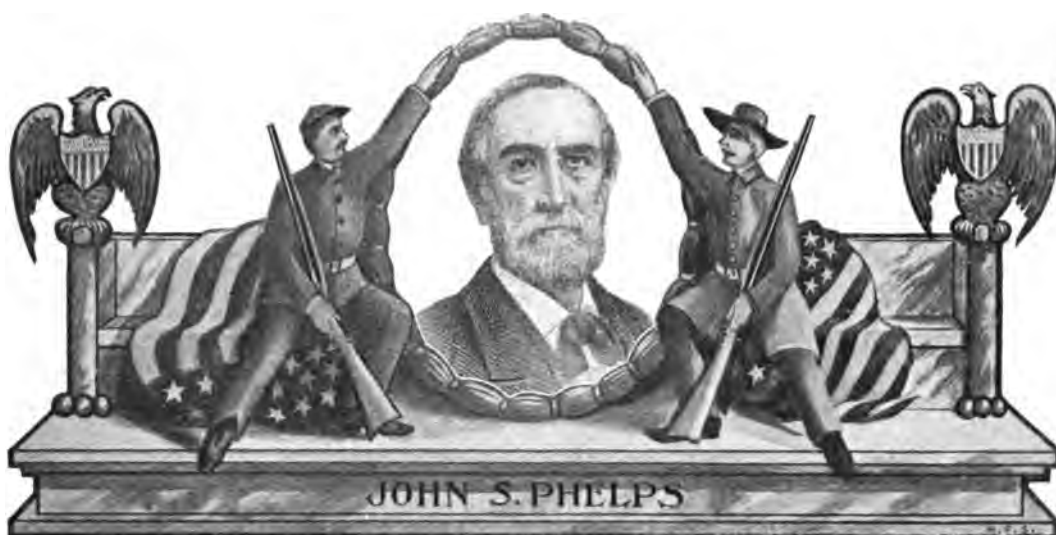
1770 The country surrendered to the Spanish.

1776 Florissant established.

1780 St. Louis attacked by the Indians and many inhabitants killed.

1785 Mississippi river flood, "The year of the great waters."

1787 Called "the year of the ten boats," ten barges having arrived in company at St. Louis from New Orleans.



GOVERNOR, 1876 TO 1880. BORN DECEMBER 22, 1814. DIED NOVEMBER 20, 1886.

The younger men spent the winters with the professional trappers on the upper Missouri or Mississippi, collecting the furs which were still one of the staple exports. In the southeast the lead mines gave an opportunity for enterprising spirits. Besides the fur and lead, the picturesque flat-bottomed barges carried down the river salt from the numerous saline springs, and beef and wheat from the fertile fields around St. Louis. In the long and tedious return voyage against the current, the boats were laden with the few articles of luxury required by the colonists, such as sugar and spices, and manufactured articles of all descriptions. The artisans were few and incompetent, so that practically all the implements except the rudest, were imported. Even the spinning wheel was a rarity in the homes of the French, and butter a special luxury. The Kentuckians were a more enterprising and ingenious people, but their influence on their easy-going neighbors was slight. The merchants, however, were energetic and successful. Much to the disgust of the English, they succeeded in centering the trade of the Mississippi valley at St. Louis and in diverting the fur trade from Montreal to the East and to New Orleans.

The intellectual life of the colony was not of a striking character. There was absolutely no provision for education and illiteracy was prevalent. Few books were to be found, and those chiefly in the libraries of the priests. The religion was of course the Roman Catholic, established by the government, but the Protestant Kentuckians, although never granted any official toleration, were not molested as long as they worshipped quietly. There was no political life, no town meetings, no elections. The forms of trial were simple and judgment direct and expeditious. Taxation was light; land was freely granted for nominal fees, and the Spanish governors were lenient and tolerant. Altogether life seems to have been very pleasant in old St. Louis. There was rude abundance and solid comfort; a gentle, easy-going, care-free people, and a refreshing absence of nervous unrest of the western American. Perhaps the content of the people was founded on a purely material prosperity, and their happiness was a rather self-satisfied complacency in existing conditions, yet one almost regrets that this simple mode of life had to yield to the more strenuous American ideals, if Missouri was to take full advantage of her commanding position.

Such was the upper Illinois country at the date of the Purchase. The Purchase itself, however, and the later history of Missouri were consequent to the great westward movement of population that ranks with the barbarian invasions and the colonization of America in the great migrations of mankind. There were

#### MISSOURI CHRONOLOGY

1788 Manuel Perez  
Commandant at  
St. Louis.

1793 Zenon Tru-  
deau Command-  
ant at St. Louis.

1798 Dehault De-  
lassus Command-  
ant at St. Louis.

1799 "The year of  
the hard winter."

MISSOURI  
CHRONOLOGY

1800 Louisiana  
retroceded to  
France by Spain.

1802 Formal  
change of pos-  
session made.

1803 Louisiana  
Purchase from  
France to the  
United States  
completed April  
30.

1804 Upper Louis-  
iana transferred to  
the United States,  
March 10.

1804 Lewis and  
Clarke Expedition  
started up the  
Missouri river,  
May 14.

four great highways from the Atlantic to the Ohio, all following river valleys as lines of the least resistance. The northern and easiest, passage, now followed by the Erie canal, was barred by the Iroquois Indians until the new century began. So the earlier pioneers crossed Pennsylvania to Pittsburg, or followed the Potomac or the Yadkin into the Shenandoah valley and crossed the western range by one of several passes, of which the Cumberland Gap is the most famous. In any case the early settlers planned to reach the Ohio, or the Tennessee, or the Cumberland. The wanderings of Daniel Boone in eastern Kentucky in 1769-71 mark the beginning of the migration. That typical frontiersman, so endeared to all Americans by his bravery and his simple heart, saw in the fertile fields of Kentucky the opportunity of the poor man with no capital but his bare hands and his courage. He was followed by a constantly increasing stream of settlers from the back country of Virginia and the Carolinas. They were of quite a different type from the great planters of the tide-water plantations. In their veins was a liberal infusion of Scotch and Irish blood. They were restless, adventurous, enterprising, and brave to a fault; the ideal people to win the first struggle with the wilderness in the battle for the West.

The prosperous settlements in eastern Kentucky welcomed the Declaration of Independence and struck an important blow in the Revolutionary war. George

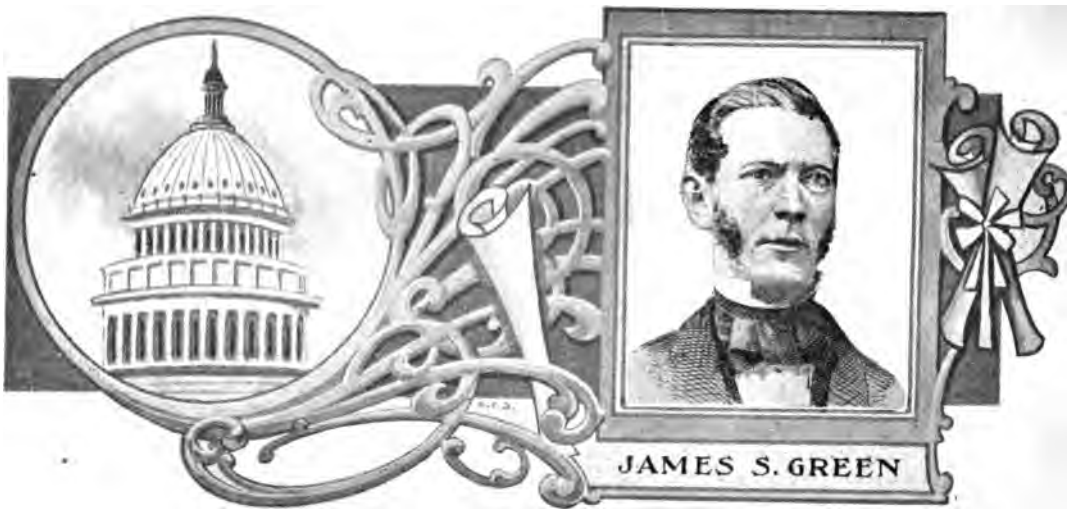
Rogers Clarke, a leading Kentuckian, led an expedition of Virginia militia and Kentucky volunteers against the British forts at Kaskaskia and Vincennes, in order to forestall a threatened Indian attack under English leadership. The forts surrendered, and their possession by the Americans somewhat strengthened their case in the negotiation of the treaty of peace. That treaty yielded to the

United States all the district between the Alleghanies and the Mississippi. The settlers now poured into Kentucky by the thousands. Men, ruined by the war or the universal stagnation that followed it, soldiers and officers whose only reward for their sacrifices were land grants in the west, and less desirable elements attracted by the speculation in land, covered Kentucky and northern Tennessee with scattered settlements. The fertile soil soon provided a surplus of food stuffs for export. But transportation over the rude roads to the seaboard was extremely difficult and expensive; the natural outlet, the only practicable one, was down the Ohio and Mississippi to New Orleans. And here Spain blocked the way. Holding both banks of the Mississippi at its mouth, she claimed the right to close it to all but Spanish commerce.

This Mississippi question was one of life and death to the men of Kentucky and Tennessee. It threatened to detach them from the Union and necessitated the Louisiana Purchase. The pioneers, with a characteristic directness, argued that it was a violation of natural justice that Spain, because she chanced



CABIN IN ST. CHARLES COUNTY  
WHERE DANIEL BOONE LIVED.



UNITED STATES SENATOR. BORN FEBRUARY 28, 1817. DIED JANUARY 9, 1870.

to own the two banks of the river at New Orleans, should be able to throttle their trade. In considerations of diplomacy and of international law they saw only technical subtleties with which Spain and the eastern States sought to obscure the justice of their case. The inherent divergence between the more conservative manufacturing and commercial east and the simpler, more direct agricultural west is as old as the west itself. The Congress of the Confederation sought long and in vain for a solution of the Mississippi question. Spain's attitude was consistent throughout; she would grant to the United States liberal commercial privileges with Spain and her colonies, but the United States must abandon, at least for a term of years, her claims to the navigation of the Mississippi. Spain hoped, if the commercial States accepted the bait, to detach the west and southwest from the Union. More than once the northern and eastern States were on the point of abandoning the Mississippi, in fact Jay negotiated a treaty accepting Spain's terms, but the resistance of the south and the discontent of Kentucky saved Congress from such a fatal concession.

The danger in those years that the western settlements would take matters into their own hands was a very real one. Added to their resentment of the hesitancy of Congress was the entirely insufficient protection afforded them from the Indians. Spanish governors of New Orleans did their best to fan the smouldering discontent into open revolt, that Kentucky might become independent and join Spain in confederation or alliance. Some of the leaders highest in the confidence of the people, notably Wilkinson and Sebastien, were the paid agents of Spain. But the sober sense of the Kentuckians prevailed and

MISSOURI  
CHRONOLOGY

1804 First English  
School established  
in St. Louis.

1805 Territory of  
Louisiana estab-  
lished with Gen.  
James Wilkinson  
as Governor,  
March 3.



MISSOURI PACIFIC RAILROAD YARDS AT JEFFERSON CITY.

1806 Ft. Bellefon-  
taine established  
on the south bank  
of the Missouri  
river, a few miles  
above its mouth.

thwarted the efforts of the conspirators. Wayne's victory over the Indians and the admission of Kentucky to the Union relieved the tension somewhat and finally, in 1795-6, the United States forced Spain to yield. She surrendered her

claims to Natchez and the south, opened the Mississippi to American trade, and provided a port of deposit at its mouth.

Meanwhile hundreds of Kentuckians had been solving the Mississippi problem by quietly moving across the Mississippi. The Spanish could offer cheap lands, light taxation, and an easy tolerance. In some cases great tracts of land were granted to one man, as to General Morgan at New Madrid. The Americans in the main left to themselves, either on their scattered farms or at New Madrid and



SKULL OF MOUNDBUILDER.  
INHABITED MISSOURI PREVIOUS TO INDIAN OCCUPATION.

#### MISSOURI CHRONOLOGY

1806 Settlements  
founded on the  
Loutre.

1806 Bethel Baptist church established near Jackson, Cape Girardeau county.

1806 John Travis appointed to the Missouri circuit, Methodist Episcopal church.

Cape Girardeau. The famous Northwest Ordinance, forbidding slavery in the Northwest Territory, retarded settlement north of the Ohio. Moreover, Kentucky was filling up with tremendous rapidity, the best lands were occupied, and obscure and conflicting land claims discouraged the later comers. And many of the original pioneers followed Daniel Boone once more to a newer country. So at the time of the purchase the majority of the inhabitants of Missouri were of English speaking ancestry from Virginia and Kentucky.

The Mississippi question was in abeyance until in 1802 the Spanish intendant at New Orleans withdrew the right of deposit. Two years before, however, Spain had retroceded Louisiana to France by the secret treaty of San Ildefonso, in return for an Italian principality to be granted to the son-in-law of the King of Spain. Napoleon was just then dreaming of the restoration of the colonial empire of France, but his activity in America forced Jefferson into a vigorous foreign policy. The slumbering discontent in Kentucky awoke with renewed intensity, the whole country was convinced at last of the importance of the free navigation of the Mississippi and Monroe went to France in 1803 as the representative of a truly national policy. He was instructed to purchase New Orleans and the Floridas, or at least to secure a port of deposit or a similar concession.

When Monroe reached Paris, he discovered that Livingston, the resident minister, had completed the preliminaries of the purchase, not of New Orleans, but of the whole district of Louisiana. Napoleon's sudden abandonment of his colonial schemes was due to the unexpected obstacles he encountered. The heroic resistance of Toussaint L'Ouverture in San Domingo was draining France of men and treasure; indeed she had been unable to take possession of Louisiana. Again, the continental policy of Napoleon made war with England almost inevitable. Colonial expansion and war with England, at the same time, were too heavy a burden for France; with her command of the sea, England could promptly seize Louisiana. Napoleon, therefore, with the remorseless disregard for sentiment that made and ruined him, met Livingston's demand for concessions on the Mississippi with the proposal to sell all of Louisiana to the United States. Before the latter had recovered from his astonishment Monroe arrived, and together they resolved to exceed their instructions and accept the bargain Napoleon "tossed into their laps." For \$15,000,000 the United States secured all



APOSTLE OF FREE SILVER. REPRESENTATIVE IN CONGRESS 1873 TO 1895.  
AND 1897 TO HIS DEATH. BORN AUGUST 10, 1835. DIED JUNE 15, 1899.

the claims of France to New Orleans and the watershed of the Mississippi on its western bank. Thus began the colonial expansion of the United States. The Louisiana Purchase more than doubled the national domain, settled forever the Mississippi question, and hastened the inevitable advance to the Pacific.

Early in 1804 Major Amos Stoddard raised the American flag in St. Louis, and for a few months remained as governor with the same powers as his Spanish predecessors. Congress then organized that part of the Purchase north of the thirty-third parallel as the District of Louisiana in the Territory of Indiana. Indiana was governed under the Northwest Ordinance by a governor. General W. H. Harrison, and by three judges, without a legislature. Congress at the same time refused to confirm by law the land grants made since 1800. The illiberal form of government and the uncertainty as to land titles evoked a formal protest from the people. In the next year Congress changed the district to the Territory of Louisiana and Jefferson appointed Wilkinson its first governor. Both Lewis and Clarke later held this office, the latter being in office when the state was admitted. The territory obtained in 1812 a legislature of two houses, the upper house, or Council appointed by the President, and a delegate to Congress; in 1816 it elected its own Council. Two years later the territory applied for admission to the Union. The governors and legislatures introduced the American law and judicial procedure, and a system of local government. Until 1812 the original five districts of the Spanish regime were retained with a simple administrative and judicial machinery. When the territory was granted a legislature, the districts became counties, with the right of representation according to population. New counties were organized as the population increased until at the date of admission the State was divided into 25 counties. The administration of the counties was developed, new courts organized and a supreme court of appeal established at St. Louis.

The transfer to the United States stimulated the western movement through Kentucky. Here and there might be found an enterprising Yankee, or a stolid German from Pennsylvania, but the immigrants were still of the sturdy old English and Scotch-Irish stock of Virginia and the Carolinas. The population was essentially agricultural and settled for the most part on detached farms or in little hamlets. The existing towns increased in inhabitants, but comparatively few new ones were founded. As in the early days,

#### MISSOURI CHRONOLOGY

1807 Frederick  
Bates acting gov-  
ernor.

1808 Merriwether  
Lewis appointed  
governor.

1808 The Missouri  
Gazette, the first  
paper west of the  
Mississippi river,  
established in July  
by Jos. Charless.

settlement followed the rivers and creeks. The inhabited strip along the Mississippi, before the Purchase perhaps twenty miles wide, in 1821 was more than doubled in width and was divided into two tiers of counties. Another stream of colonists ascended the Missouri to the Boon's Lick country, on the Missouri



THE HARNEY MANSION.

river. A flourishing settlement grew up there in the early days and three counties were organized before 1821. Franklin was the chief town of the district and the centre of the western trade. It was the headquarters of the hunters and trappers and of the traders who followed the old Santa Fe trail to New Mexico. Both banks of the Missouri were occupied and organized as counties and a beginning made along the Missis-

MISSOURI  
CHRONOLOGY

issippi to the northward. Altogether there were some 60,000 inhabitants in the territory when it became a State.

1808 The Missouri  
Fur Company es-  
tablished.

During the territorial period Missouri became American in government and in character. The French influences persisted longer in the older Mississippi towns; French merchants in St. Louis controlled much of the trade; individual Frenchmen were prominent in society and politics; but the coming of the newspapers and the steamboats ended the old regime. St. Louis with its fire engine and two newspapers was a bustling western town, while the Boon's Lick settlements reproduced the early days of Kentucky. The boisterous bullies of the river, the reckless adventurers so inevitable in a frontier settlement, with their feuds and duels, gave a false impression of lawlessness of those early days. The Missourians were a buoyant, optimistic people, quick to take offense, and preferring a rude and ready justice; indeed, they had the faults and virtues of the frontiersman everywhere, but they kept the Anglo-Saxon reverence for law and order. They were an agricultural people even more than in the earlier days, for the fur trade was already past its zenith. Somewhat less than a sixth of the population were slaves, to be found in the older Mississippi country, but on the whole the plantation system of the South was unsuited to Missouri. Wheat, corn, and beef with salt and lead, were the chief productions of the territory. The trade still followed the rivers, and received a great stimulus from the coming of the steamboats, which made the rivers highways in both directions. The greater part of the exports, however, were still floated down to New Orleans in the clumsy barges, which were commonly sold as lumber with the cargo.

1810 Boon's Lick  
settlements made  
(now Howard  
county).

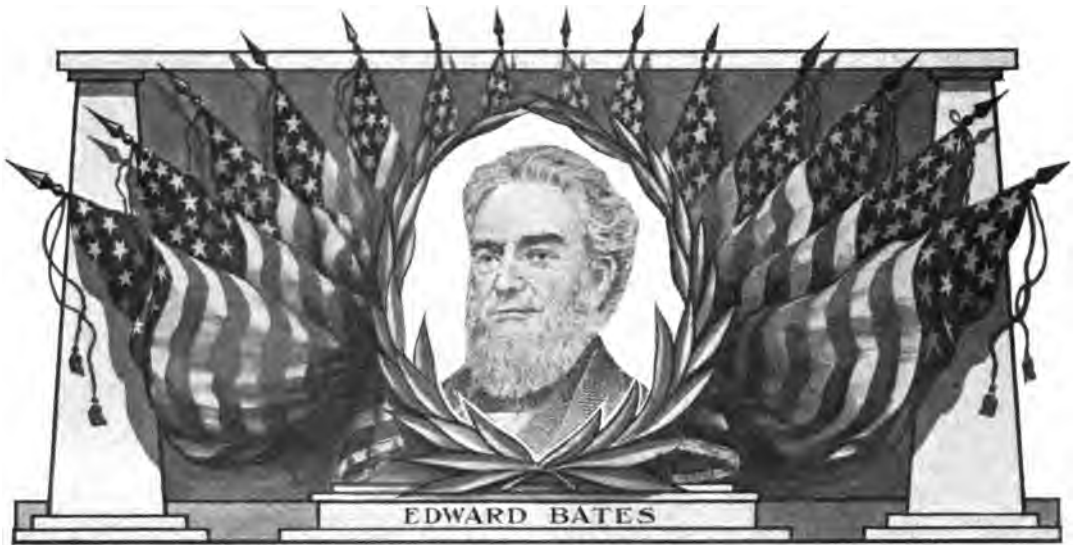
1810 Benjamin  
Howard gover-  
nor.

The petition of this flourishing territory for admission to the Union began the long political contest over slavery and State rights, and for the first time divided the country by a geographical line into a Northern and a Southern section. The North had viewed with complacency the admission of Kentucky, Tennessee, Louisiana and Mississippi as slave states. Why then did she demand that Missouri should be free; why did the inevitable opposition of the two sections break out on

1811 New Madrid  
destroyed by an  
earthquake,  
December 16.



ON THE CLASSIC HINKSON CREEK.



ATTORNEY-GENERAL IN LINCOLN'S CABINET. BORN  
SEPTEMBER 4, 1793. DIED MARCH 25, 1869.

the admission of Missouri? Kentucky and Tennessee were admitted when the best men, north and south, were united in a philosophical condemnation of slavery, and a hope of its ultimate extinction. Louisiana and Mississippi, and Alabama, which was admitted as a slave State in 1819, were all far to the southward and surrounded by slave territory. Missouri, however, was on the border line, and was not a great slaveholding community—slavery was not the foundation of its social and economic structure. Moreover, it was the first state to be formed from the northern part of the Louisiana Purchase. But the political question of the balance of power between the sections was the immediate cause of the struggle. At the adoption of the Constitution, North and South were nearly equal in population and representation, but in thirty years the free States had developed much more rapidly and gained a preponderance in the House of Representatives. In the Senate with its representation by States the relation of the sections had remained unchanged. Up to 1818, the new States, had been admitted in pairs, a free State with a slave State, but in that year both Missouri and Alabama were clamoring for admission. If both came in as slave States, the existing balance in the Senate would be destroyed. Alabama was by geographical position, inevitably slave. So the North was determined that Missouri should be free.

As soon as the debates in Congress began, the difference of opinion was seen to go much deeper than any political question of balance of power. The divergence in the development of political and social ideals in the two sections appeared so plainly as to appall the nation. On the question of slavery the older philosophical disapproval of the North had broadened into a growing conviction that slavery was a moral and an economic wrong. Almost all of the northern States had abolished slavery and believed that its further extension should be resisted. The South had moved even further in the opposite direction. Instead of the earlier theoretical condemnation of slavery, the South now regarded it as indispensable to its present mode of existence. No one thing had done as much to bring about this change as the invention of the cotton gin and the enormous development of the cotton culture, which had increased threefold the value of slaves and promised the South an era of unexampled prosperity. Intimately connected with this developing difference of opinion on slavery, was a more serious divergence in political ideals, a radically

#### MISSOURI CHRONOLOGY

1812 Territory of Louisiana changed to Territory of Missouri, January 4, with William Clarke governor.

1812 Bank of St. Louis incorporated.

1813 First brick house in St. Louis built by Wm. C Carr.

1814 Many Indian massacres occurred in Missouri.



MISSOURI  
CHRONOLOGY

1817 Charles Lucas  
killed in a duel  
with Thomas H.  
Benton.

1817 The General  
Pike, the first  
steamer to land  
at St. Louis.

different conception of the relation of the States to the general government. The South held that the powers of the general government should be limited by a strict and literal interpretation of the Constitution, and that the Constitution was a compact between the States. In the North, however, the older particularistic theories of the powers of the States were yielding to a devotion to the Union, and a desire to extend the general powers of the government.

This divergence had been growing silently for years, almost unsuspected; now it startled North and South alike. In Congress the struggle over Missouri was a contest between the House and the Senate. In 1819 the House, by its adoption of the Tallmadge resolution that the further introduction of slavery into Missouri should be prohibited, and that all children born of slaves should be free at twenty-five years of age, committed itself to the theory that Congress might compel a State to abolish slavery as a condition of admission. The Senate refused to concur. Arkansas territory was set off from Missouri, however, with no restrictions as to slavery. When Congress reassembled in December, the Missouri question was complicated by the application of Maine for admission as a free State. The Senate was resolved that the two States must

be admitted together or not at all. The House was equally determined that Missouri should not be admitted as a slave State. The debates which followed showed the country how far it had drifted toward disunion. The arguments on the one hand were that Congress had no right to impose conditions on the admission of a State; that the restriction urged by the House violated the guarantees of the Treaty of Purchase, and that slavery was necessary to the prosperity of the South and the best thing for the negro. These propositions were denied *in toto* by the North.

Moderate men of both sections sought some compromise, and finally united on the proposal of Senator Thomas, of Illinois. This first Missouri compromise satisfied neither party, but finally passed both Houses in 1820 by small majorities. By it Maine was admitted, as a free State of course, and no restriction as to slavery was introduced into the permission to Missouri to form a State constitution. But from all the rest of the Louisiana Purchase north of 36 degrees, 30 minutes, the southern boundary of Missouri, slavery was forever excluded.

Missouri acted at once on this permission. A convention met at St. Louis and drew up a State constitution, which bore few traces of the excitement of the time, and remained the fundamental law of the State until after the war. In its main outlines it bore a close resemblance to the Constitution of Kentucky. The democratic character of the inhabitants was reflected in the



MONUMENT TO THOMAS JEFFERSON, ORIGINALLY ERECTED AT MONTICELLO FROM DESIGNS LEFT BY MR. JEFFERSON; NOW ON STATE UNIVERSITY CAMPUS AT COLUMBIA.



UNITED STATES SENATOR, 1863 TO 1867. GOVERNOR, 1871  
TO 1873. BORN MAY 28, 1826. DIED DECEMBER 13, 1885.

provision for universal suffrage; the disqualification of clergymen for the higher offices, and the prohibition of the Legislature to charter more than one bank, reflected unpleasant incidents in the previous history of the territory. But the clauses as to slavery attracted the most attention and had an unforeseen result. Before the debates in Congress there was a respectable minority in favor of the prohibition of slavery, but the natural resentment which swept over the State at the attempt of the North to impose conditions on her admission, destroyed its influence. The Convention seems to have been unanimous against the restriction of slavery. The Constitution declared that the Legislature had no power to emancipate slaves without the consent of their owners, a clause which Benton has claimed to originate to take slavery out of State politics. The Legislature could provide for emancipation with the consent of the masters, and it was its duty to secure humane treatment for the slaves. Finally, the Legislature was to see to it, by suitable legislation, that all free negroes and mulattoes be excluded from the State.

The decision of the State was in no sense determined by the attempted dictation of the North. Missouri was not a great slaveholding community, frontier settlements never are; nor were conditions favorable in general, for the plantation system. Less than one-sixth of the population were negroes in 1820 and the ratio steadily decreased. But slavery had always existed in the territory, the great mass of the population were familiar with the system, were descendants of slaveholders and bound by ties of sympathy and blood to the South. The Constitution was declared in force by the Convention, and, as every one believed that the admission was a mere formality, the people elected a governor and legislature and organized a State government. Missouri for a time was practically, if not legally, a State without the Union.

Congress, however, did not admit Missouri to the Union until after months of fierce and acrimonious debates. The extremists, North and South, were dissatisfied with the first compromise, and in the House of Representatives refused to accept Missouri's Constitution on the grounds that the clauses as to free negroes were unconstitutional. The Senate, as before, was on the side of Missouri. Neither would yield, the excitement in Congress and in the country threatened the very existence of the Union, when Henry Clay, by his

#### MISSOURI CHRONOLOGY

1818 Congress asked to authorize a state government for Missouri.

1819 The Independence, the first steamer to ascend the Missouri river, went to Old Franklin in May.

1819 The Tallmadge anti-slavery resolution affecting the admission of Missouri as a state, passed by the United States House of Representatives.

MISSOURI  
CHRONOLOGY

1820 Bill providing for the establishment of the state of Missouri passed both houses of Congress in March.

1820 Forty-one members of a Constitutional Convention elected in May.

1820 The Constitutional Convention met in St. Louis June 12, and adjourned July 19.

1820 Alexander McNair elected governor of Missouri in August.

personal influence and eloquence, induced Congress to accept the second Missouri compromise. Missouri was to be admitted under her Constitution, when she pledged herself, by a solemn public act, never to construe certain specified clauses of it so as to authorize any law abridging the rights of citizens of any other State. Missouri, with her State government fully organized, and her senators and representatives in Washington waiting for recognition, resented this seemingly treacherous delay of Congress. But the Legislature passed a resolution which Monroe recognized as fulfilling the conditions, and Missouri entered the Union. And, curiously enough, the articles of the Constitution enumerated in the act of Congress and the resolution of the Legislature can not by any human ingenuity be identified with the clauses excluding free negroes!

The first State elections resulted in the choice of Alexander McNair as Governor, and John Scott, the old territorial delegate, as representative. The Legislature was nearly unanimous in favor of Barton as senator, and after a protracted contest chose Thomas Hart Benton as his colleague. Barton served continuously until 1831, and Benton until 1851. All in all, Benton is the greatest man Missouri has produced. At Washington he stood in the front rank in the Senate which included Clay, Webster and Calhoun. He was the intimate and trusted friend of Jackson. At home he dominated the democratic party until his retirement, and was one of the best types of the rugged western democracy. His strength lay rather in his unwearied industry, and his natural sound sense than in eloquence or learning. Throughout his long career he was the steadfast advocate of specie currency and a liberal land policy—both essential to the development of his State—and went down in defeat on his opposition to the extension of slavery.

Political parties, however, did not emerge until the presidential election of 1828, when Missouri then cast her vote for Jackson. Probably opposition to the national bank and the money power influenced the votes in 1828, but Missouri was naturally democratic; Jackson, the man of the people, represented the ideals and aspirations of the majority of Missourians. Slavery and her southern sympathies kept the State in the democratic party until the stirring times before the war.

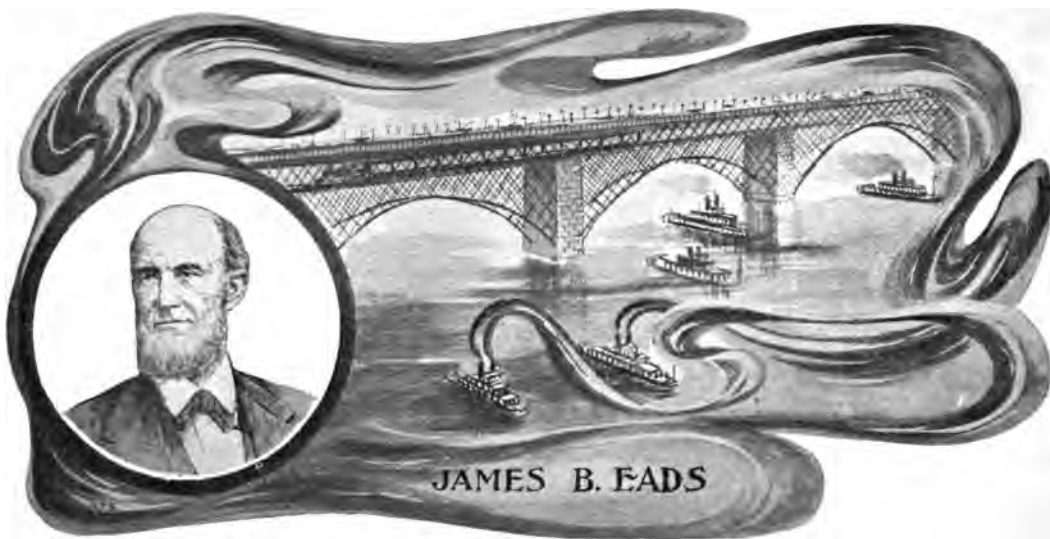
The influence of slavery on Missouri's political history must not be overestimated, however. The proportion of negroes to the total population steadily diminished, and these



ST. CHARLES COUNTY RESIDENCE WHERE  
DANIEL BOONE DIED IN 1832.



ON A COUNTRY ROADSIDE



ENGINEER. BUILDER OF THE ST. LOUIS BRIDGE AND MISSISSIPPI RIVER JETTIES.  
BORN MAY 23, 1820. DIED MARCH 8, 1887.

negroes were found chiefly in the fertile lands along the great rivers, and in the older portions of the State. Throughout the State free labor was the rule. The anti-slavery minority revived after the admission of the State. Many of her ablest men, Benton in particular, disliked slavery, were opposed to its extension, and longed for its disappearance. The leaders, drawn from all political parties, met in 1828 in secret conference, and planned a campaign for gradual emancipation, and the prospect for success seemed excellent, when the excesses of a New York abolitionist raised the spectre of social equality between the races, and the whole scheme was abandoned before it was disclosed. Resentment at the extreme views of the abolitionists created an insurmountable obstacle to any successful agitation later and, perhaps, prevented gradual emancipation in both Kentucky and Missouri.

The general legislation up to 1849 does not call for any extended comment. The Legislature devoted much of its time to providing for the increase in population by the organization of new counties and perfecting the local government. The laws of the State were carefully revised in the session of 1824-5, and again at the end of the succeeding decades. Several minor amendments to the Constitution were adopted from time to time, but the attempt to remodel the instrument by the Convention of 1845 was rejected by the people.

The chief concern of the Missourians was in the battle with the wilderness. The population, which doubled every ten years until the war, was still drawn in the main from Kentucky, but the population was losing its earlier homogeneity. The northern stream of immigration through the Mohawk valley and the old Northwest reached the Mississippi and joined the earlier movement in Missouri, and the men from Illinois and the northeast began to form an important element in the State. The Germans, the first foreign born immigrants to the State, were settling in large numbers about St. Louis and to the northeast. They were a frugal, industrious, and law-abiding people, and, except for their tendency to retain their own language and customs, a thoroughly desirable acquisition. The older districts were soon fully occupied, so the bulk of these later immigrations followed up the tributaries of the Missouri and the Mississippi and settled in the back country. Many of them settled in or near the

#### MISSOURI CHRONOLOGY

1820 The first Legislature of Missouri met in St. Louis the 3d Monday in September, with 14 senators and 43 representatives.

1820 Legislature adjourned September 26, in honor of Daniel Boone, who died that day.

1820 An act of Legislature passed November 28, fixed the seat of government at St. Charles until October 1, 1826, at which date it was to be removed to Jefferson City.

MISSOURI  
CHRONOLOGY

1821 The admission of Missouri as a state was refused by Congress on February 11, account of the State Constitution requiring free negroes and mulattoes to be excluded from settling in the state.

1821 The Clay formula, making the condition that the "restrictive section" of the constitution of Missouri should not be construed to affect any citizen of any state, was passed by Congress on February 26.

1821 June 4 a special session of the Missouri legislature was held at St. Charles which passed the required act of Congress.

large towns. The whole State was subdivided into counties of reasonable size. It was losing, also, somewhat of its distinctively southern character.

Missouri was still primarily an agricultural State. Manufactures were in their infancy, and commerce, outside of food stuffs, was confined to furs and the Mexican trade. The former had diminished greatly in amount and importance, but the Mexican trade which followed the picturesque

old Santa Fe trail, became sufficiently important for the United States to survey the easiest route in 1825. Roads were built throughout the State, as the density of population warranted the expense, but the steamboats on the Mississippi were still the easiest means of transportation. The towns increased in number and in wealth and St. Louis became one of the important cities of the Union. The wild speculation in public lands which followed the deposits of the United States in the State banks and the distribution of the surplus stimulated a feverish and fictitious prosperity, and the collapse brought ruin to many individuals. The healthy growth in population and wealth continued; meanwhile, the State wisely refrained from a ruinous system of public improvements, and Missouri recovered quickly from the financial depression.

One result of the demand for land was the acquisition of the triangle between the western boundary and the Missouri river—the Platte Purchase of 1836. There were two obstacles to the consent of Congress to this increase in territory, the existence of an Indian reservation there, and the violation of the letter of the Compromise of 1820. The Missouri senators, Benton and Linn, secured this fertile region, now one of the richest in the State. The first settlers in the extreme west, however, were the Mormons, fresh from their trials in the east. They were a thrifty people and prospered in their new homes, but their peculiar moral and religious views aroused the dislike of their neighbors; they were accused of horse stealing and much petty dishonesty, and were soon attacked and retaliated in kind. The militia finally broke up the Mormon settlements, forced them to abandon their property and leave the State.

Missouri was no longer merely a frontier settlement. In 1839 the Legislature applied the proceeds from the public lands donated in 1820 to the foundation of a State University, which was located in Columbia. After a long

period of slow but solid growth, the University has of late entered on a period of phenomenal development and now ranks with the best of the State universities. St. Louis was a city of sufficient importance to attract Lafayette in his triumphal progress and to induce Webster to journey from New England to see the growing Empire of the West. Missouri never had a serious Indian question of her



REPRESENTATIVE MISSOURI HOME—CASS COUNTY.



AN EVENING MEAL.



LEADER OF THE MARCH TO MEXICO, THE GREATEST IN HISTORY. BORN JULY 9, 1808. DIED AUGUST 8, 1887.

own, but she sent her militia to crush the Black Hawk rising in the North, and to destroy the Seminoles in Florida. Her senators and representatives at Washington were heard in every important discussion, and Missouri in general took an intelligent and active part in national affairs.

The revolt of Texas, with its consequent annexation and war with Mexico, aroused more interest in Missouri than in any other State, perhaps. A very large number of the Americans who appropriated Texas when it was still a Mexican State, were Missourians, many more took part in the Texan war of independence, so that ties of blood reinforced the characteristic land hunger which aroused the West in favor of annexation. The extension of slave territory, which appealed to the disciples of Calhoun, had only a secondary interest for Missouri. At the very outset of the war, a regiment of Missouri volunteers hastened to New Orleans to defend Louisiana. Her most striking service, however, was in the conquest of New Mexico. General Kearney, of the regular army, organized an expedition at Fort Leavenworth, composed of a small number of regular troops and the famous "Doniphan's Brigade" of Missourians. This little army, a thousand strong, traveled the Santa Fe trail for nine hundred miles in fifty days, and captured Santa Fe without a struggle. The expedition was absolutely without any base of supplies from the day it left Fort Leavenworth; the march lay through uninhabited wilderness and desert. General Doniphan passed on into Mexico, did valiant service against Mexicans and Indians, and returned by sea to New Orleans. A second regiment followed Doniphan down the trail and policed New Mexico until the end of the war. A third regiment was ready to start out when peace was made.

The question of slavery in the regions acquired from Mexico revived the geographical division of political parties, and opened the struggle which culminated in the Civil War. In Congress Henry Clay put through the last and greatest of his compromises; in Missouri, however, there was no compromise. Benton had been the unquestioned leader of the democrats for twenty-five years, but now the majority of them revolted against him and his steadfast resistance to the extension of slavery in the territories.

#### MISSOURI CHRONOLOG

1821 On August 10, a copy of the act of the legislature delivered to the president of the United States and he immediately proclaimed the admission of Missouri as a state.

1821 Bank of the State of Missouri established. Offices were established and proved financially successful to the people.



EARLY HOME OF GOV. CHARLES H. HARDIN, COLUMBIA. FIRST BRICK HOUSE IN CENTRAL MISSOURI.

1821 The first census of the territory of Louisiana was taken, showing a population of 5,500.

MISSOURI  
CHRONOLOGY

1822 St. Louis was  
incorporated by  
the legislature.

1823 Joshua Barton  
killed in a duel  
with Thomas C.  
Rector.

1824 Frederick  
Bates elected  
governor.

Moreover, his imperious and ill-controlled temper had made him many enemies, and his autocratic will alienated the younger men. His opponents accordingly attacked him through the Jackson resolutions passed by the Missouri legislature in 1849. These resolutions, denied in the strongest terms the power of Congress to interfere with slavery in the territories and hint not obscurely at the possibility and legality of secession. They were, and were intended to be, a direct censure on Benton. His reply was characteristic. On the floor of the Senate he denounced the resolutions as unwise, unsound, and disloyal; he denied that they represented the real opinion of his State; he continued his fight against the extension of slavery until the Compromise was passed, and then went back to Missouri to face his opponents.

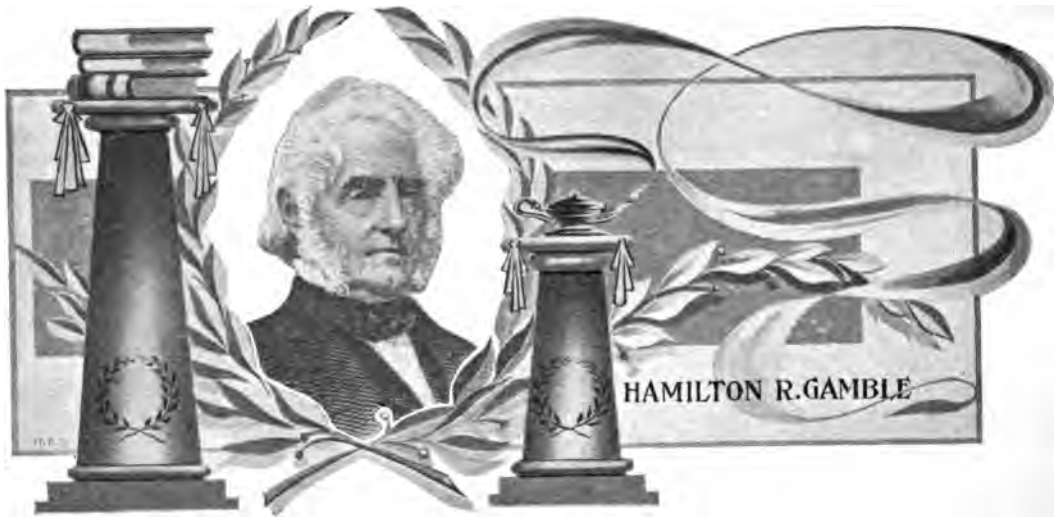
The principles put forward in the Jackson resolutions served as a political platform to the pro-slavery democrats until the war. Benton in 1850 appealed from the Legislature to the people and conducted a vigorous campaign throughout the State in the election of the next Legislature. His speeches were a curious mixture of sound political sense and a wealth of personal invective and denunciation characteristic of the man. The democratic majority in the Legislature of 1851 was divided into two factions, for and against Benton, so that the whigs were holding the balance of power. The anti-Benton democrats joined the whigs and elected a whig to succeed Benton. The latter returned to Congress as a representative in 1852, where he was out-spoken in opposition to the Kansas-Nebraska bill. His friends in the Legislature prevented any choice

of United States senator in 1854 and brought his name forward as a candidate in 1856, in which year he was also a candidate for governor, standing third on the list, but his vote combined with that of the American candidate far outnumbered that of the regular democratic ticket. Benton himself died soon afterward; his supporters were divided among the Americans, the union democrats, and the republicans. The other wing of the democratic party was more than ever committed to slavery and the South. The opposition to it did not take effective form until the presidential election of 1860.

Meanwhile, in Congress, Douglas with his Kansas-Nebraska act had repealed the Missouri Compromise and established his principle of "squatter sovereignty." The existence of slavery in the territories was to be left to the people of the territories. The doctrine proved a dangerous one in its practical operation, for there was no agreement as to when the people should make their decision, whether under the territorial government or at admission as a State. In the specific act organizing Kansas and Nebraska, Missouri was directly interested in the status of Kansas. If Kansas decided against slavery, slavery in western Missouri, surrounded as it would be on two sides by free territory, would be in a precarious position. Moreover, the South in general believed that it was the intention, unexpressed it is true, that Kansas should be slave, and Nebraska

CONFEDERATE  
MONUMENT—  
SPRINGFIELD.





WAR GOVERNOR 1861-1864. BORN NOVEMBER 29, 1798. DIED JANUARY 31, 1864.

free. Thus the Missourians would resent any interference with slavery in Kansas as prejudicial to their welfare and as a violation of natural justice.

When Kansas territory was organized in 1854, there were a number of Missourians in the district, who at once were reinforced by settlers from the western counties. But certain energetic New England opponents of slavery were determined that Kansas should be free, even under popular sovereignty, and through their "Emigrant Aid Societies" they aided hundreds of northern men to emigrate to Kansas. The earliest of these settlers seem to have been "bona fide" emigrants interested primarily in bettering their fortunes. But the colonization scheme seemed to the Missourians a quite unjustifiable interference; they retaliated with the formation of Blue Lodges whose purpose was to aid the southerners in Kansas to maintain their political superiority. They appealed to the South for aid in money and for settlers.

So far, the efforts of either section were equally legitimate or illegitimate. But the South was hopelessly handicapped by the system of slavery in the race to occupy Kansas. There was no large class available for emigration. The whites were either slaveholders and owners of plantations who could not easily convert their property into cash, or poor whites, while the north could send out an army of mechanics, artisans, petty merchants, or small farmers. Only one band from the South of any size answered the call of Missouri. She by herself could not cope with the natural immigration from Illinois and Iowa, reinforced by the surplus population of New England sent on by the Emigrant Aid Societies. Within a year it was evident that Kansas was slipping out of the grasp of the South. It was over two years before President Buchanan found a governor firm enough to establish order with the help of the federal troops. A desultory warfare continued on the Missouri border until the war, and was a training school for the guerrillas and bush-whackers in the later contest.

This struggle for Kansas reacted on Missouri politics and strengthened the pro-slavery democrats. The old whig party disappeared and was replaced by the Americans and the union democrats. The republican party made little headway outside of St. Louis. James S. Rollins, an old-line whig, secured the support of these elements of opposition to the regular democracy and in 1857 was defeated for governor by 334 votes only. The national parties, also, were in a chaotic condition at the presidential election in 1860. There were four candidates and four platforms on the slavery question before the people. The demo-

#### MISSOURI CHRONOLOGY

1825 Governor  
Bates died and  
was succeeded by  
Abraham J.  
Williams, presi-  
dent of the State  
Senate.

1825 John Miller  
elected governor.

1825 Lafayette vis-  
ited St. Louis.

1826 The fourth  
annual session of  
the Missouri leg-  
islature was the  
first one to meet  
at Jefferson City.



MISSOURI  
CHRONOLOGY

AN AFTERNOON IN HARVESTING DAYS.

cratic party was rent in twain; the southern delegates nominated Breckenridge and denied the power of Congress or the territorial government to exclude slavery; the northern delegates chose Douglas, with a platform reaffirming the doctrine of "popular sovereignty." The republicans nominated Lincoln and de-

clared their absolute opposition to the further extension of slavery. A convention of the older whigs and Americans, calling themselves union democrats, tried to eliminate slavery from the campaign by proclaiming "the Constitution, the Union, and the enforcement of the laws" their platform. Bell was their candidate.

In Missouri the contest lay between the various democratic candidates. The union

democrats attracted the conservatives and drew heavily from both sections of the democratic party. In the State election the factions patched up a truce and elected as governor a Douglas democrat. In the national election, however, the Douglas ticket was successful, with a majority over the union democrats of but 429. The Breckenridge ticket was 27,000 votes behind that of Bell, and the republican electors at the bottom of the poll. Missouri had repudiated the extreme doctrines on slavery, both northern and southern, and cast her vote for a conservative policy and mutual concessions. Such was her attitude until civil war made it no longer tenable.

The decade before the war was one of great prosperity to the State. Population still increased at about the same rate, but the political troubles in Europe and the Irish famine sent over large numbers of Germans and Irish, so that the foreign born comprised one-seventh of the population. The first railroad was begun in 1850, followed by many others, all liberally aided by State guarantee of their loans. The first general grant of State funds to the public schools was made in 1852-3. Twenty per cent of the revenue of the State was to be divided among the counties for public instruction. This policy, changed in detail in 1875, has been continued ever since.

The governor elected in 1860, Claiborne F. Jackson, was the sponsor for the Jackson resolutions of 1849. The Legislature was hopelessly divided. The Breckenridge democrats were the most numerous, but were outnumbered by the combined vote of the Douglas and Bell adherents, while the republicans were few but active. The Legislature had not been long in session when the Governor called upon them to take action on the question of secession. He recommended that a convention be summoned to ascertain the will of the people. The republicans were almost alone in opposition, but the moderate members forestalled any precipitate action by inserting a proviso that the convention submit any act or resolution that changed or dissolved the political relations of the State to the Union, to a popular vote.

In the election of delegates to the convention, secession was presented to the people as a political issue for the first time. The result was a surprise to all and a disappointment to the extreme Southern sympathizers. The convention did not include a single avowed champion of secession. The people regarded the secession of South Carolina and the Cotton States as hasty and unjustified by any act of the federal government. The vote, however, was not a condemnation of secession as unrighteous or unconstitutional; it did not mean that the majority were uncompromisingly Union. Missouri called for delay and compromise, for the preservation of the Union if possible. That this was the real sentiment of the State appears in the appointment, by the Legislature, of delegates to the

1827 The Kansas, Shawnees and Iowa tribes of Indians removed from the state of Missouri.

1828 John Miller re-elected governor.

1829 A battle between the Whites and Indians occurred in Randolph county in July, 3 of the former and 12 of the latter being killed.

1830 Spencer Pettis and Major Biddle fight a duel and each is killed.

1831 The Mormons first settled in Jackson county.



ARTIST. BORN MARCH 20, 1811. DIED JULY 7, 1879. THE PICTURE REPRODUCES HIS FAMOUS *County Election*, NOW IN MERCANTILE LIBRARY, ST. LOUIS.

Peace Conference in Virginia, and, by the convention, to the Border States Congress of Kentucky, and especially in the resolutions of the convention. These resolutions declared that, at present, there was no adequate reason for Missouri to leave the Union; that Missouri favored any fair compromise, endorsed the Crittenden Compromise, and desired a national convention; and that, as coercion of the seceding States would inevitably lead to civil war, Missouri entreated the national government not to employ force. The convention then adjourned, after empowering a committee to call it together again if necessary.

The decision of the convention was a crushing blow to the Southern sympathizers, and paralyzed their efforts for a time, although Jackson and the chief officials of the State were with them. They needed arms for their adherents and had already secured the pledge of the commander of the arsenal at St. Louis that he would surrender it to the State. Now they were forced to bide their time. Meanwhile Francis P. Blair, the leader of the Missouri republicans, was organizing a force to protect the arsenal. The Germans at St. Louis had formed marching clubs during the presidential campaign; these Blair quietly but openly transformed into military organizations. The Germans were quite untouched by the perplexing problem of State sovereignty, and were moved only by their opposition to slavery and their attachment to the Union. Lincoln acted on the advice of Blair and sent Captain Lyon, an uncompromising Union man, to command the increased garrison at the arsenal. The guns were safe from any sudden attack.

Governor Jackson and his party recovered some of their lost ground when Lincoln called for State troops after the attack on Fort Sumter. Jackson refused to obey the call of the President on the ground that Lincoln's purpose was "unconstitutional and diabolical." The neutrality of the State, which was perhaps the wish of a majority, was no longer possible, and Missouri had to cast her lot with the North or South. For a few weeks it was uncertain whether the people would be influenced most by their loyalty to the Union or their resentment at the attack on the seceding States. In the Legislature the Southern sympathizers revived a militia bill to place the State on a war footing, and Governor Jackson established a practice camp for militia on the outskirts of St. Louis. He succeeded in smuggling in guns and ammunition from the South.

#### MISSOURI CHRONOLOGY

1831 The first steamboat from St. Louis went to the head waters of the Missouri river.

1832 During the Black Hawk War, Major General Gentry of Columbia established fortifications in northeast Missouri.

1832 Daniel Dunklin elected governor.

1832 Asiatic cholera killed over 400 people in St. Louis.

Blair offered his Germans to Lincoln as Missouri's quota of militia, and five regiments were mustered into the United States service. The two parties were now armed and face to face at St. Louis.



A MISSOURIAN OF THE EARLY DAYS.

*Photo by Joe L. Douglass, Columbia*

Through the spring of 1861 Missouri and the border slave States were the greatest source of anxiety to Lincoln. Their support was absolutely necessary to the South, if secession was to be successful; if they seceded, the success of the North was doubtful. Maryland and Delaware, from geographical position, Lincoln was obliged to secure at all costs. Virginia, on the other hand, in spite of her reluctance, was certain to join the South the moment war broke out. But Kentucky and Missouri hung in the balance. Lincoln knew that open interference here might drive these States from the Union and give to the South a wealth of men and treasure.

These border States for a time dreamed of a position of neutrality and Lincoln waited with patience until they should see that this was impossible. Missouri was the more doubtful State;

indeed, at this critical period, she once more played a decisive part in the nation's history. Lincoln was particularly fortunate in that two Missourians of undoubted honesty and ability, Montgomery Blair and Edward Bates, were in his cabinet. Through them he kept in touch with Francis Blair and the republicans in St. Louis. He relied on Lyon and the German regiments to thwart Jackson and the secessionists, and refused as yet to send Federal troops into the State.

When the Governor began to mobilize the militia at Camp Jackson, Lyon felt it was time to strike. The Governor was evidently planning to override the decision of the convention and refuse obedience to the President. His militia, although insignificant as yet, were certainly a nucleus for a revolutionary force. So Lyon surrounded Camp Jackson with his Germans and regulars, and forced the militia to surrender without a blow. They were so outnumbered that resistance was impossible. Indeed, they were not an immediate danger to the republicans and Lyon's attack must be regarded as a precautionary measure. Most unfortunately, the soldiers, who were roughly handled by the crowd of Southern sympathizers, fired upon the people, and killed and wounded a number of innocent spectators.

For a few days it seemed that this vigorous action of Lyon would defeat its own purpose and drive the State into secession. A grossly exaggerated report of the brutality of the German troops sent a wave of resentment through the State and carried the unfortunate militia bill through the Legislature. This diverted most of the revenue to the organization of the militia, whom the governor was empowered to enlist to the number of 50,000. But the excitement died down as the real facts became known, and the Federal troops remained inactive at St. Louis. For a month Governor Jackson and General Price were reorganizing the State militia, and seeking a recognition of neutrality from General Harney. When he was superseded by Lyon, the crisis came. Jackson and Price met Lyon at St. Louis in conference, and the latter demanded that the new militia be disbanded and absolutely refused to pledge himself not to occupy the State with Federal troops. His terms were refused, and two days later he moved his troops by water to Jefferson City. The State militia lacked arms and

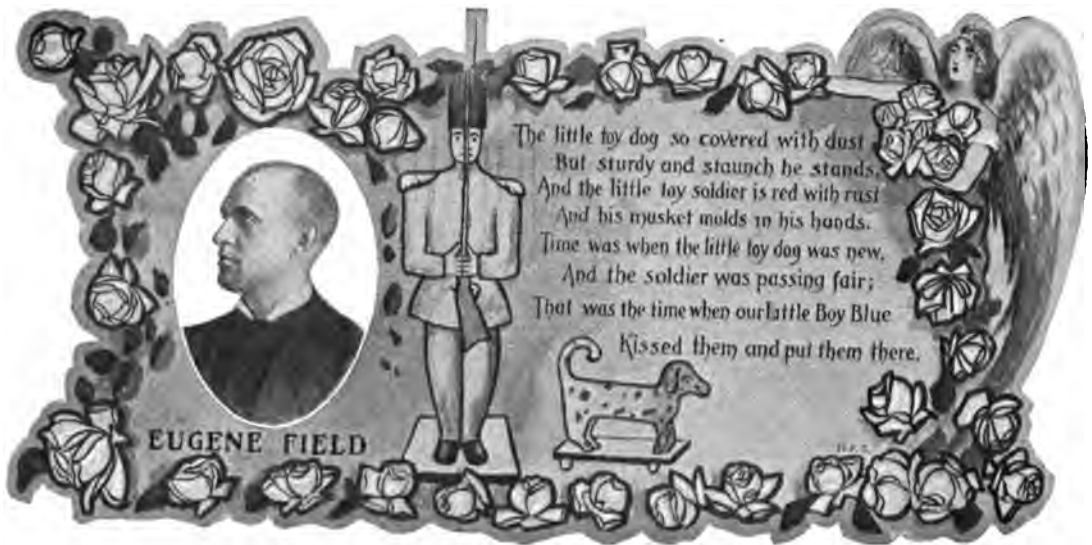
#### MISSOURI CHRONOLOGY

1833 Mormons  
driven from  
Jackson county.

1833 Over 100  
people die from  
cholera at St.  
Charles.

1834 Lewis F. Linn  
elected U. S.  
Senator.

1835 A destructive  
fire at St. Louis  
destroyed the  
Cathedral and  
many other  
buildings.



THE CHILDREN'S POET. BORN SEPTEMBER 2, 1850. DIED NOVEMBER 4, 1895.

organization, they were scattered in a brief engagement at Boonville, and the Governor and the Southern members of the Legislature fled to the southwest. Here the fragment of the Legislature met somewhat later and passed an act of secession. The Governor and General Price retired to Arkansas to organize an army with the Confederate General McCullough.

None of the battles of the campaigns in Missouri had in any sense of the word a decisive influence in the Civil War. At the outset, the Confederates under Price and McCullough held the southwestern part of the State. Lyon met his death in an effort to dislodge them with an insufficient force, but in 1862 they were forced to evacuate the State. In 1864 Price made a brilliant raid across the State up the Missouri valley, but accomplished nothing beyond the destruction of public property. Missouri, however, suffered severely throughout the war from a cruel and destructive guerrilla warfare. Almost every county had its band of Southern sympathizers who were forced to abandon their homes and take to "bush-whacking" or slip south to join the Confederates. The worst elements in the old border warfare reappeared in organized bands of outlaws or as irregular troops under the Federal flag. The Union commanders placed the State under martial law, and maintained an army of occupation. Some of them indeed, seemed to have forgotten that Missouri was not in rebellion. Still, in spite of the hard feeling thus engendered, Missouri sent over 109,000 men to the Union armies, more in proportion to her population than any other State in the Union, beside perhaps 30,000 more who enlisted under the Confederate flag.

The flight of Governor Jackson and the dispersal of the Legislature in 1861 left the State without an organized government. The convention re-assembled at Jefferson City and assumed control of the State. By what purported to be amendments to the Constitution, it vacated the offices of Governor, of Lieutenant-Governor, and of Secretary of State, and appointed Hamilton R. Gamble provisional governor. At a later meeting in the same year the convention abolished minor officers, cut down salaries, organized the militia, and issued State Defence bonds. It required also an oath of allegiance to the Union from every State officer. In the following year it expelled all of its members who had joined the Confederates, and tabled Lincoln's proposal for gradual emancipation. It adopted, also, a more stringent test oath to be taken by every voter. Finally, in 1863, it adopted a plan of gradual emancipation, and dissolved itself. Al-

#### MISSOURI CHRONOLOGY

- 1836 Lilburn W. Boggs elected governor.
- 1836 Stephen F. Austin, born at Potosi, with others, went to Texas to aid in the fight for independence, and established Austin the capital of that state.
- 1836 The state penitentiary at Jefferson City opened with one inmate.
- 1836 Railroad from St. Louis to the Iron Mountain chartered.



BIRD'S EYE VIEW OF CITY OF ST. LOUIS, THE METROPOLIS OF MISSOURI— FROM THE MISSISSIPPI RIVER, LOOKING WEST.



BISHOP E. M. MARVIN. PREACHER. BORN JUNE 12, 1823. DIED DECEMBER 3, 1877.

though a new Legislature was elected in 1862, the convention and its Governor were the paramount political power in Missouri for over two years. It certainly put the most liberal of interpretations on its powers, yet it is due to it that Missouri had a continuous State government throughout the war and escaped the horrors of reconstruction.



MARK TWAIN AT HIS OLD HOME IN HANNIBAL.

In the election of the Legislature in 1862 the voters called for emancipation of the slaves and the convention in 1863 passed its emancipation ordinance. The radical republicans were much disappointed with its gradual character, and with the moderate policy of Governor Gamble. They tried in vain to secure the interference of Lincoln in State politics. In the next year, however, they gained control of the State government, and of the new Constitutional Convention. This convention, which met in 1865, drafted an entire new Constitution, which was adopted by the people. Its provisions on certain questions, notably education and finance, were a distinct advance on the original Constitution, but its real purpose was to put in force the programme of the radical republicans. Slavery was at once and forever abolished. The conditions required of all voters were so drastic that every man who had not been from the beginning uncompromising in his support of the Union was disfranchised. Every voter was to be registered, was to take the famous "Iron Clad" oath, that he had never committed any of a long catalogue of acts, including every conceivable display of sympathy with the South, and, moreover, must convince the registration officers that he swore truly. The oath was demanded

from every State or county officer, every teacher, attorney, or minister, and from every man who voted on the ratification of the Constitution. Yet the Constitution was adopted only by a small majority.

The radicals controlled the government until 1870. Although the supreme court of the United States declared the "Iron Clad" oath unconstitutional, the

#### MISSOURI CHRONOLOGY

1836 Great floods throughout Missouri.

1837 Ex-Senator David Barton died September 26, at Boonville.

1837 The state house at Jefferson City burned November 17, with all the early records.

1837 Col. Richard Gentry killed in Florida during the Seminole War, on December 1.



FRUIT EXPERIMENT STATION, MOUNTAIN GROVE.

MISSOURI  
CHRONOLOGY

- 1838 The contest as to the state line between Missouri and Iowa began.
- 1838 Mormons expelled from Missouri.
- 1838 Ex-Governor William Clarke died.
- 1839 State University established at Columbia.
- 1839 Heavy immigration into Missouri, estimated at 50,000.
- 1840 Thomas Reynolds elected governor.

Legislature passed a more stringent registration law and reduced the democrats to a helpless minority. The more moderate republicans, B. Gratz Brown, Blair, and Carl Schurz, were opposed to any such wholesale disfranchisement. The attempt to extort the oath from professional men occasioned much petty persecution and popular reaction against the radicals. A large number of the republicans were quite out of sympathy with the dominant faction in their party, and organized a movement for the repeal of the obnoxious suffrage clauses in the Constitution. The first proposed amendment, however, was to extend the right of suffrage to the negro. It was defeated. The negro received his right to vote from the Fifteenth Amendment, adopted in Missouri in 1870.

In the State election of 1870, the republican party split on the question of the repeal of the "Iron Clad Oath." Both factions nominated candidates for Governor. The democrats refused to place a ticket in the field, and threw their strength to B. Gratz Brown, liberal republican. He was elected and a majority of the Legislature were opposed to the radical programme. At the same election the oath of loyalty for voters was abolished by Constitutional amendment and all the citizens once more possessed the right to register their will at the polls. During the next few years, the new democracy, loyal to the Union, steadily gained ground and attracted the moderate republicans. A coalition of the two divided the State ticket between them in 1872; Horace Greely as an independent candidate opposed to the republican policy of reconstruction, carried Missouri in the presidential election. Four years later the democrats had gained a supremacy in the State they have been able to maintain ever since.

Missouri has developed farther and faster in the last quarter of a century than in all her previous history. But her achievements belong rather to the writer of economic and social history—many of the movements are not yet complete—so that it seems best to close this brief sketch at this point when the war and its results ceased to affect directly the political history of the State. During these last years the wealth and material prosperity of the State have increased enormously. The march of westward settlement has left her far behind, so that she has lost entirely her earlier character of a frontier State. The genius of Eads bridged the Mississippi, and the railroads now cover her territory and join her to the Atlantic, the Lakes, the Pacific and the Gulf. She has become the center of trade of the new Southwest. Although agriculture is still the solid foundation of her prosperity, she is now a great manufacturing State as well. Emigrants from the Old World, Illinois, Iowa and Kansas are still seeking homes within her borders, and she is herself a colonizing State and has filled Colorado, Oklahoma, Texas, Montana, and the Pacific coast with her people. And yet the sentiment of every Missourian, and of every student of her history is, that the real development of the State has hardly begun.



# HOW THE COMMONWEALTH IS GOVERNED



**F**OR an adequate appreciation of the true nature and significance of political institutions reference must be made to their historical development. The limits of this article do not permit a detailed discussion of institutional growth in Missouri. In another part of this volume the development of Missouri has been traced from its position as a colonial district under French and Spanish rule through the several phases of territorial government to its admission as a State into the Union. Missouri has had three Constitutions, the first adopted in 1820, the second in 1865, and the present one in 1875. It is the purpose of this article to describe the machinery of government as it exists under the present Constitution.

The Constitution of 1875 was framed by a convention which met at Jefferson City, was adopted by a vote of the people on October 30, 1875, and went into effect on November 30, 1875. It consists of fifteen Articles, dealing with Boundaries, Bill of Rights, Distribution of Powers,





MISSOURI  
CHRONOLOGY

Legislative Department, Executive Department, Judicial Department, Impeachments, Suffrage and Elections, Counties, Cities and Towns, Revenue and Taxation, Education, Corporations, Militia, Miscellaneous Provisions, and Mode of Amending the Constitution.

Eighteen amendments to the Constitution have been adopted as follows: one in 1884, one in 1890, one in 1892, seven in 1900, eight in 1902; five additional amendments have been proposed by the present General Assembly and will be voted on at the general election in November of this year. These numerous amendments are indicative of a desire for a general revision of the Constitution which has been strongly urged in recent years.

The Bill of Rights contains thirty-two sections defining in general those rights and immunities in respect to person and property which were gained by Englishmen during their long constitutional struggle from Magna Charta to the Bill of Rights, and embracing those which were added by Americans during the colonial period. They include the right of trial by jury and other privileges respecting civil and criminal procedure and prohibit ex post facto laws, and imprisonment for debt. It is also provided that freedom of speech, press, and religion shall exist and "that no money shall ever be taken from the public treasury, directly or indirectly, in aid of any church, sect or denomination of religion."

In Missouri the grant of the elective franchise is extremely liberal. The right to vote is possessed by every male citizen of the United States and every male alien who has legally declared his intention to become a citizen of the United States not less than one year nor more than five years before he offers to vote, who is over twenty-one years of age and has resided in the State one year and in the county, city or town where he votes at least sixty days, but no member of the military or naval forces of the United States, nor any person kept in any public poorhouse, asylum, or prison, nor any one convicted of certain crimes is allowed to vote. In 1900, the total number of votes cast for governor was 684,294, or twenty-two per cent of the total population. This is larger than the average of other States in the Union, and shows that the people manifest a keen interest in the selection of their officials and that parties are well organized. These parties have their State and local committees, conventions, primaries, etc. Laws exist which are designed to prevent fraud at such primaries and special provisions are made for St. Louis and Kansas City. In all cities containing 25,000 or more inhabitants the law requires the registration of voters but in other parts of the State no system of registration is provided.

The Australian ballot system of voting is provided for all except minor elections. All nominations for State offices must be certified by the Secretary of State. Aside from this, however, the administration of the election laws is left to the local authorities except in St. Louis and Kansas City, each of which has a board of election commissioners consisting of three members appointed by the Governor. The members of the St. Louis board serve for a term of four years and their appointment must be approved by the Senate. One of the members must belong to the leading party politically opposed to the Governor. The members of the Kansas City board serve for a term of three years, and one must be a member of the leading party politically opposed to that to which the other two members belong.

The powers of government in Missouri are divided between the central and local governments. In the central government there is further sub-division of powers "into three distinct departments—the legislative, the executive and the judicial."

The Legislature, which is styled The General Assembly of the State of Missouri, consists of two Houses, the Senate and the House of Representatives. The Senate consists of thirty-four members. After each decennial census the State is divided into thirty-four districts as nearly equal in population as may be and each district elects one senator. Senators are chosen for a period of four years,

1842 J. B. C. Lucas, a leading citizen of St. Louis, died.

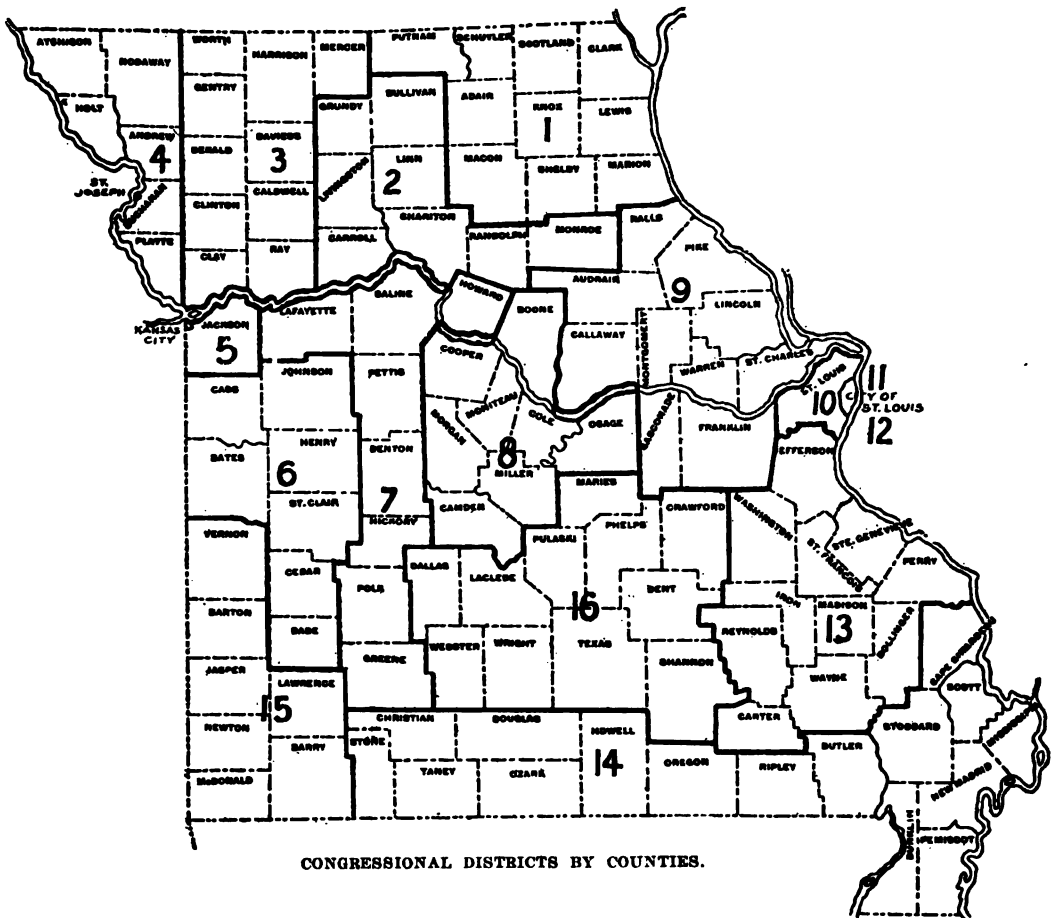
1843 Senator Linn died, and David R. Atchison was appointed to fill the vacancy.

1844 Governor Reynolds committed suicide by shooting himself in the head, and was succeeded by Lieut.-Gov. M. M. Marmaduke.

1844 John C. Edwards elected governor.

1844 Ex-Governor Dunklin died July 25

1844 Great floods on the Missouri and Mississippi rivers.



but are divided into two classes so that only one-half of the total number retire every two years.

Representatives are chosen for a term of two years and the number varies with the population. After each decennial census a ratio is established by dividing the total population of the State by 200. The present ratio is 15,553. Counties having one ratio of population or less are entitled to one representative; those having two and a half times said ratio, to two representatives; those having four times said ratio, to three representatives; those having six times said ratio, to four representatives; and those having more than this number are entitled to one additional representative for every two and a half additional ratios. This method of apportionment gives a relatively greater representation to the smaller counties. Under the census of 1900, the apportionment of representatives is as follows: St. Louis city, sixteen; Jackson county, six; Buchanan county, four; Jasper county, three; Greene and St. Louis counties, two each;



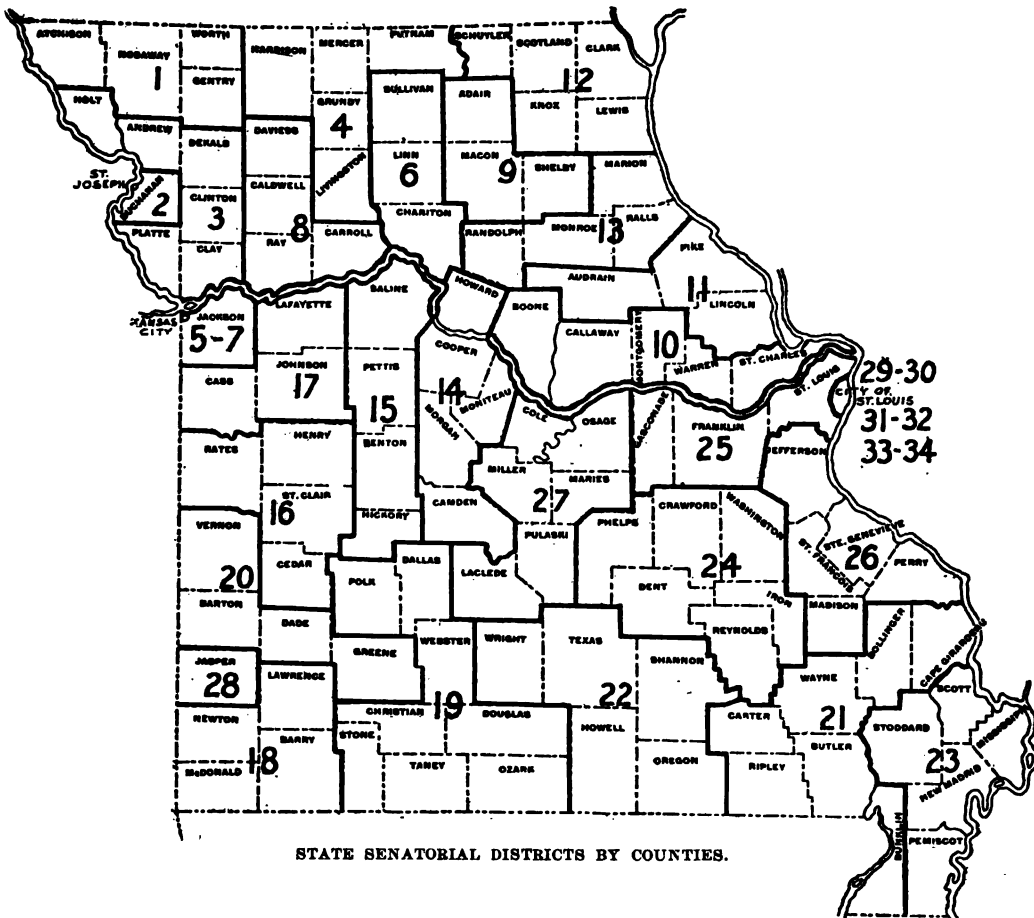
NODAWAY COUNTY COURT HOUSE, MARYVILLE.

and the remaining one hundred and nine counties, one each, making a total of one hundred and forty-two representatives. Counties are divided into as many districts as they have representatives and the voters of each district elect one representative. If, however, a county is entitled to more than ten rep-

MISSOURI  
CHRONOLOGY

1845 State line troubles between Iowa and Missouri cause bloodshed.

1845 Constitutional Convention met at Jefferson City.



STATE SENATORIAL DISTRICTS BY COUNTIES.

MISSOURI  
CHRONOLOGY

- 1846 Regiments for the Mexican War raised in Missouri, commanded by Cols. A. W. Doniphan and Sterling Price.
- 1846 New Constitution rejected by popular vote.
- 1848 Austin A. King elected governor.
- 1848 State boundary contest between Iowa and Missouri settled by the U. S. Supreme Court in favor of Iowa.
- representatives each district must be given not less than two nor more than four representatives. This applies at present only to the city of St. Louis, which has six districts, four of which are each entitled to three representatives, while the other two each elect two representatives.
- No person is eligible as senator until he is thirty years of age and has been a qualified voter for three years; nor as representative until he is twenty-four years of age and has been a qualified voter for two years; nor to either position unless he is a male citizen of the United States, has been a resident of the district from which he may be chosen for one year next preceding his election and has paid a State and county tax within said period. Senators and representatives receive an allowance for traveling expenses and \$30 for stationery. They are also entitled to a compensation of \$5 a day for the first 70 days of the session and after that to \$1 a day for the remainder of the session. The statutes of the State are revised once in every ten years and at the session in which such revision is made, the period during which members of the Assembly may receive the full compensation of \$5 is 120 days.
- The General Assembly meets at the State capitol at Jefferson City. A regular session is held once in every two years and begins on the first Wednesday after the first day of January. No limit is fixed to the length of the session but the reduction of the compensation of members after 70 days of an ordinary session and 120 days of a revising session tends to limit the session to those periods. Thus the session of the Fortieth General Assembly, which was a revising session, continued 139 days and the present General Assembly was in session 76 days. The Governor, on extraordinary occasions, may convene the General As-



PORTLAND PLACE, AN EXCLUSIVE RESIDENCE DISTRICT, ST. LOUIS.

MISSOURI  
CHRONOLOGY

1849 Fire at St. Louis in May destroyed over 400 buildings, causing a loss of over three millions.

1849 Cholera was very fatal this summer, over 4,000 people dying in St. Louis.

1850 Benton and anti-Benton contest over the State attracted great attention, Benton losing.

1851 Henry S. Geyer, Whig, elected Senator by a coalition of Whigs and anti-Benton Democrats.

1852 Sterling Price elected governor.

sembly for a consideration of such special matters as he shall submit to them. The provisions for reducing the compensation after a certain period do not apply to extra sessions. The sessions of each house are generally public, but if necessary, they may be held with closed doors.

Each house appoints its own officers, except that in the Senate the position of President devolves upon the Lieutenant-Governor by virtue of his office. The presiding officer in each house appoints the committees to which all bills must be referred and which exercise a great influence upon the course and character of legislation.

In the ordinary course of legislation a bill must be read on three different days in each house, be passed by a majority of the members of each house and be approved by the Governor. If the Governor disapproves of the measure, it must be returned to the house in which it originated and in order to become a law, it must be agreed to by two-thirds of all the members of each house. The general appropriation act takes effect from the date of its enactment, but other acts do not go into force until ninety days after the adjournment of the session, unless in case of an emergency, the General Assembly shall, by a vote of two-thirds of the members of each house, otherwise direct.

The General Assembly has complete power of legislation except where it has been limited by the Constitution. The Constitution of 1820 contained few restrictions upon the legislature though these were increased by the adoption of amendments to the Constitution. The tendency has been to increase the limitations upon legislative power and in the Constitution of 1875 they have become quite numerous and extensive. In general, the restrictions are placed upon the financial powers of the General Assembly and upon its power to pass local and special acts with reference to a large number of matters.

In addition to legislative powers the House of Representatives has the power of impeachment in the case of the principal State officers, including judges, who are charged with high crimes and misdemeanors or with misconduct, habits of drunkenness or oppression in office. All impeachments are tried by the Senate. Conviction requires the concurrence of two-thirds of the senators present. Judgment can extend no further than removal from office and disqualification to hold any other office under the State. The person impeached, however, is liable to prosecution and punishment by the ordinary courts, according to law.

The Executive Department includes those officials who supervise the execution of the laws and administer the affairs of the commonwealth. The Constitution provides that it shall consist of a Governor, Lieutenant-Governor, Secretary of State, State Auditor, State Treasurer, Attorney-General, and Superintendent of Public Schools, all of whom are elected by the people for terms of four years and are eligible to re-election except the Governor and State Treasurer, who can not be re-elected as their own successors. The Governor must be at least thirty-five years old and must have been a citizen of the United States ten years and a resident of Missouri seven years next before his election. He

receives an annual salary of \$5,000 and the use of a furnished residence at the capital. The Lieutenant-Governor must possess the same qualifications as the Governor. He receives an annual salary of \$1,000 and \$7 additional per day



INDUSTRIAL HOME FOR GIRLS, CHILLICOTHE.

during the session of the Senate. No person is eligible to any of the other executive offices indicated above unless he is a male citizen of the United States, at least twenty-five years old, and has been a resident of the State at least five years next before his election.

Each of such officials receives an annual salary of \$3,000. In addition to these officials the statutes provide for a large number of officers, boards, and commissions, all of whom are appointive officials or hold their positions *ex officio* except the three railroad and warehouse commissioners, who are elected by the people.

The chief executive power is vested in the Governor. It is the Governor's duty to see that the laws are faithfully executed. He is commander-in-chief of the militia and may call out the same to execute the laws. He has the power to grant reprieves, commutations, and pardons for all offenses except treason and cases of impeachment. He appoints a large number of officials, in some cases with the consent of the Senate, and fills all offices which become vacant unless other provision is made by law. He also has a limited power of removal.

In addition to his executive powers, the Governor has considerable influence upon legislation. As has been indicated above, he can call the Legislature in extraordinary session. He gives the General Assembly information relative to the condition and needs of the State, and recommends such measures as he deems expedient. He possesses the veto power which includes the right to veto specific items in appropriation bills.

In case of death, impeachment or conviction, failure to qualify, resignation, absence from the State, or other disability of the Governor, the powers, duties and emoluments of the office devolve upon the Lieutenant-Governor until the disability is removed or the term expires. He is also, *ex officio*, president of the Senate. In case the Lieutenant-Governor is under any disability, the president *pro tempore* of the Senate and the speaker of the House of Representatives succeed in regular order to the office of Governor.

Missouri differs from the national government in the method of organizing the administrative activities. Instead of grouping all such matters under a few executive departments the plan has been followed in many cases of organizing a separate and practically independent division for each individual field of activity. An official or board, either elective or appointive, is placed at the head of each division, and as a rule is not responsible to any superior authority for the character of the administration. In considering this administrative organization, however, it will be of advantage to group these divisions according to their nature under certain general heads.

The Treasury Department is administered by the State Auditor, State Treasurer, and Board of Fund Commissioners. The State Auditor has general supervision over the financial operations of the State; he keeps the public accounts, audits the accounts of county collectors and other holders of public money, enforces the payment of all amounts due the State, audits all claims against the State and grants all warrants or payment of money out of the State Treasury, save in exceptional cases where the law may make other provision. He makes a report to each General Assembly, setting forth the financial opera-

1853 The Hannibal and St. Joseph and St. Louis and Pacific railroads under construction.

1855 Lieut.-Gov. Wilson Brown died at Cape Girardeau, August 27.

1855 The Gasconade river bridge on the Missouri Pacific railroad collapsed under a heavy excursion train on November 1, and some 30 people were killed and over 70 injured.

1856 Truman Polk elected governor.

1857 Gov. Polk elected to the U. S. Senate and succeeded by Lieut.-Gov. Hancock Jackson.

tions for the preceding two years and estimates of revenue and expenditures for the ensuing biennial period, with such recommendations as he may deem expedient. He gives a bond of \$500,000.

The State Treasurer receives and keeps the moneys of the State and disburses the same upon warrants drawn upon the treasury. He is required to give a bond of \$500,000.

The Board of Fund Commissioners consists of the Governor, State Auditor, State Treasurer, and Attorney-General, the first two being president and secretary respectively. The board has supervisory control over the treasury department and administers the public debt.

During the years 1851-1857, Missouri incurred a debt of \$23,701,000 for the purpose of aiding the construction of railroads in the State. It was expected that this debt would be liquidated by the railroad companies, but all of them with the exception of the Hannibal and St. Joseph Railroad Co. defaulted in the payment of interest and principal. This was largely due to the breaking out of the Civil War, though some of the roads defaulted in the payment of interest as early as 1859. By 1865 military expenses and unpaid interest had increased the debt of the State to more than \$36,000,000. During the next four years this debt was reduced by more than \$14,000,000, this amount being obtained chiefly through the sale of stock of the State in the bank of the State of Missouri, from payments for railroads sold by the State and from reimbursements by the United States government for war expenditures. In 1869 the bonded debt amounted to \$21,675,000. It was reduced to \$16,518,000 in 1883, to \$9,711,000 in 1893, and it was entirely extinguished in 1903.

There still exist, however, State certificates of indebtedness amounting to \$4,398,839.42. These were issued in exchange for money and securities which were taken from the State public schools and seminary (University of Missouri) funds and applied to the reduction of the bonded debt of the State. The certificates of indebtedness are non-negotiable and are intended to be a permanent obligation upon the State. They bear interest at the rate of five or six per cent per annum, and represent a large part of the public school endowment and the entire interest bearing endowment of the University of Missouri. The amount of certificates held to the credit of each fund and the annual income received therefrom are:

	Amount.	Annual Int.
Public School Fund .....	\$3,159,000 00	\$187,040 00
Seminary Fund .....	1,239,839 42	63,211 96

The total bonded indebtedness of counties and townships on July 1, 1902, was \$8,066,878. The total bonded indebtedness of cities and towns on the same date was \$31,193,870. The bonded indebtedness of the city of St. Louis represents nearly four-fifths of the latter figure.

The liberality of the State in loaning its credit for the promotion of railroads, contributed in large measure to the development of the magnificent system of railroads in Missouri, and thereby to the increase of the wealth of the State. The fact, however, that the State treasury never received any direct compensation for the greater part of the loan led to distrust on the part of the people and this is manifested in the present Constitution by the existence of stringent restrictions upon the power of incurring indebtedness. The General Assembly is forbidden to give or pledge the credit of the State in aid of any individual

MISSOURI  
CHRONOLOGY

1857 Robert M  
Stewart elected  
governor.



STATE GEOLOGICAL SURVEY, SCHOOL OF  
MINES, ROLLA.

1858 Serious  
troubles between  
Western Mis-  
souri and Kan-  
sas.

1859 Southwest  
Expedition sent  
out by Governor  
Stewart.

1860 Claiborne  
Jackson elected  
governor.

MISSOURI  
CHRONOLOGY

1861 Convention to which was given control of all relations between the States assembled February 28.

1861 Camp Jackson at St. Louis captured by General Lyon on May 10.

1861 Governor Jackson called for 50,000 militia on June 12.

or corporation. The only case in which any one is permitted to incur a debt on behalf of the State is on the occurring of an unforeseen emergency or casual deficiency of the revenue, when, upon the recommendation of the Governor, the General Assembly may incur a debt not to exceed \$250,000 in any one year, and provision must be made for its repayment in not more than two years; in all other cases the proposition for the debt must be submitted to the qualified voters and ratified by a two-thirds majority. Similar provisions limit the debt-creating power of counties, cities, and other local subdivisions of the State.

The general property tax is the chief source of revenue. All property, real or personal, with limited exemptions for religious, educational, and charitable purposes is subject to direct taxation for State, county, city and other local purposes. Property is assessed for taxation by assessors elected in each county or in each township in counties having township organization. A county Board of Equalization consisting of the county judges, surveyor, and assessor, reviews and equalizes valuations within the county and assesses any property that may have been omitted from the assessor's books. In St. Louis city the assessment is made by the Board of Assessors, consisting of a President elected by the voters of the city and of one assessor appointed by the mayor, with the consent of the council, for each assessment district into which the city is divided. The Board of Equalization of the city of St. Louis consists of the President of the Board of Assessors and four real estate owners, resident in the city at least ten years, who are appointed by the circuit judges of St. Louis. The State Board of Equalization, consisting of the Governor, State auditor, State treasurer, secretary of State, and attorney-general, adjusts and equalizes valuations among the several counties of the State. In addition such Board assesses the property of railroad, bridge, telegraph, and telephone companies. The law requires that property shall be assessed at its cash value, but it is well known that it is assessed at much less. Under the system of valuation by local assessors great lack of uniformity exists with respect to the proportion of actual cash value which is taken as the basis of assessed value.

Statistics collected by the State Revenue Commission in 1902, show that this varies all the way from thirty per cent to one hundred per cent, with a probable average of from forty per cent to fifty per cent.

Missouri is distinguished on account of the stringent restrictions which the Constitution places upon the rate of taxation. It is provided that the State tax upon property, exclusive of the tax necessary to pay the debt of the State, shall not exceed fifteen cents on each one hundred dollars valuation. Restrictions also exist upon the rates for local purposes. These provisions are likewise due to the feeling of dis-



IN THE SCHOOL FOR THE BLIND, ST. LOUIS.

trust engendered by the era of public aid to railroads during which period public debt and taxation were greatly increased. These conditions, however, can not be repeated, and there is a growing feeling that the present limitations are too restrictive to enable the State and its local subdivisions to provide adequately for their legitimate needs. The following tabular exhibit shows the assessed valuation of real and personal property and railroad, bridge, telegraph, and telephone property, and the rate of taxation for State purposes for the years 1872, 1882, 1892, 1902 and 1903:

YEAR	ASSESSED VALUATION OF REAL AND PERSON- AL PROPERTY	ASSESSED VALUATION OF RAILROAD, BRIDGE, TELEGRAPH AND TEL- EPHONE PROPERTY	TOTAL ASSESSED VALUE	RATE OF TAXATION FOR STATE PUR- POSES ON EACH \$100 VALUATION
1872 . . . . .	\$ 572,293,377	\$ 20,867,895	\$ 593,161,272	45 cents
1882 . . . . .	615,260,539	35,626,524	650,887,563	40 cents
1892 . . . . .	853,754,205	63,884,057	917,638,262	25 cents
1902 . . . . .	1,052,716,812	120,869,198	1,173,586,010	25 cents
1903 . . . . .	1,117,170,229	125,427,191	1,242,594,420	18 cents

#### MISSOURI CHRONOLOGY

1861 Federal troops occupied Jefferson City on June 15.

1861 The battle of Boonville, the first on Missouri soil, on June 17.

This does not include the assessed valuation of merchants and manufacturers' stock and machinery which for 1903 amounted to \$85,367,817, making the total assessed valuation of the taxable wealth of Missouri for 1903, \$1,327,962,237. It will be noted that while the total assessed valuation has largely increased the tax rate has steadily decreased so that the total amount of taxes collected from this source in 1903 is little if any larger than that received in 1872.

For 1904, the tax levy for State purposes is 17 cents on each one hundred dollars valuation, of which 2 cents provides for the payment of interest on the State public school and seminary certificates of indebtedness. The constitution provides that at least twenty-five per cent of the gen-

STATE HOSPITAL FOR INSANE, NUMBER FOUR, FARMINGTON..

eral revenue of the State shall be applied to the support of public schools. As a matter of fact the General Assembly regularly appropriates thirty-three and one-third per cent for such purposes, leaving only 10 cents on each one hundred dollars valuation as the rate for general State purposes.

A collector elected in each county or in each township in counties having township organization, collects the general property tax and pays into the State treasury the amount of State taxes collected.

In addition to the general property tax the State levies a number of special taxes and fees of which the most productive are those on beer, dramshop licenses, collateral inheritances, foreign insurance companies, and incorporation of companies. The accompanying tables of the receipts into and the disbursements from the State treasury during the biennial period ending December 31, 1902, show the amounts received from the different taxes, etc., and the general purposes for which expenditures were made.

1861 The battle of Cole Camp on June 18.

1861 The battle of Carthage on July 5.







STATE HOSPITAL FOR INSANE, NUMBER TWO, ST. JOSEPH.

MISSOURI  
CHRONOLOGY

1861 The Convention declared all State offices vacant, and chose Hamilton R. Gamble provisional governor on July 30.

1861 Battle of Wilson's Creek, August 10.

1861 Lexington surrendered by Col. Mulligan to General Price, September 21.

1861 Battle of Springfield, September 25.

1861 Battle of Belmont, November 7.

RECEIPTS		EXPENDITURES	
General Property Tax	\$5,672,164.11	Public Debt, Principal	\$1,400,012.05
Licenses Taxes (Chiefly on Dramshops)	858,042.15	Public Debt, Interest	92,747.20
Beer Inspection	770,613.78	Legislative Department	173,889.16
Collateral Inheritance Tax	443,139.12	Judiciary	383,403.27
Incorporation Tax	334,475.00	General Administrative Departments	310,620.34
Tax on Foreign Insurance Companies	312,298.97	Agriculture, Commerce and Industry	326,396.11
Earnings of Penitentiary	500,051.26	Assessing and Collecting Revenue	371,717.50
Income of Eleemosynary Institutions	987,663.52	Militia	44,962.67
Fees of State Officers	152,127.12	Printing and Publishing	132,444.62
Excise Commissioner's Fees	51,278.20	Criminal Costs	617,801.07
Interest on Deposits	76,162.30	Penitentiary	498,507.36
Miscellaneous	80,568.28	Eleemosynary Institutions	1,911,856.78
Total	\$10,238,583.81	Public Schools	2,275,326.26
		State University	602,763.84
		Normal Schools	207,057.37
		Miscellaneous	24,096.00
		Total	\$9,373,601.60

It will be noted that the most considerable item of expenditure is for public education. In addition to this sum, however, public schools derive revenue from county, township and district school funds, aggregating \$8,396,434, and from taxes levied in the several school districts.

Some of the special taxes are collected by the county and township collectors, but beer inspection fees are collected by the beer inspector, and taxes on foreign insurance companies and incorporation fees are paid directly into the State treasury. The granting of dramshop licenses is under the control of local authorities except in St. Louis, where there is an Excise Commissioner appointed by and holding office during the pleasure of the Governor. He has authority to charge fees, aggregating \$9 semi-annually for each license issued. He retains forty per cent of the total fees collected for his compensation and the expenses of his office, the balance being paid into the State treasury. The State tax on dramshop licenses is collected by the city collector in St. Louis and by county or township collectors in the counties.

The Secretary of State is the custodian of the seal of the State and of all public records and actions of the General Assembly; he countersigns official acts of the Governor and preserves a register of the same; he superintends the printing and distribution of the laws and of the journals of the General Assembly and of the Official Manual of the State; he issues certificates of incorporation and registers trade-marks. All certificates of nomination of candidates for State offices must be filed in his office and he certifies the same to the authorities of the several counties of the State; he performs the duty of registrar of lands and has charge of the examination of State banks and trust companies.

The Attorney-General is the chief legal adviser and prosecuting attorney of the State. It is his duty to give his opinion whenever requested upon questions of law to the General Assembly, principal executive officers and to the



STATE HOSPITAL FOR INSANE, NUMBER ONE, FULTON.

prosecuting attorneys of the counties. He is required to appear in the Supreme Court to prosecute or defend all cases to which the State is a party. He is empowered to institute and prosecute in the name of the State all legal proceedings necessary to protect its rights and to enforce its claims against all persons and when directed by the Governor he is required to aid any prosecuting attorney in the discharge of his duties.

A prosecuting attorney is elected in each county of the State for a period of two years, to represent the State in his county and in all criminal cases in the courts of appeals. He is also the legal adviser and prosecuting attorney of his county. In the city of St. Louis the term is four years and a circuit attorney is also elected for the same period, the functions of the prosecuting attorney being restricted to the court of criminal correction whose jurisdiction is limited to misdemeanors.

A sheriff elected in each county, a constable elected in each township and police officers elected in small towns and appointed in larger cities are the administrative officers of the courts in their respective jurisdictions. The appointment and control of police officers is in charge of the city authorities except in St. Louis, Kansas City, and St. Joseph, each of which has a Board of Police Commissioners appointed by the Governor with the consent of the Senate. The St. Louis Board consists of the mayor, *ex officio*, and four commissioners appointed for terms of four years. In Kansas City the Board consists of the mayor, *ex officio*, and two commissioners appointed for terms of three years. In St. Joseph there are three commissioners serving for terms of three years.

The Adjutant-General is the chief administrative officer of the National Guard of Missouri. He is appointed by and holds office during the pleasure of the Governor who is commander-in-chief. The National Guard of Missouri is at present organized in one brigade consisting of four regiments, one battalion, and two unattached companies of infantry and one battery of artillery. The battalion of cadets of the Missouri Military School, a department of the University of Missouri, is also a part of the National Guard of the State.

MISSOURI  
CHRONOLOGY

1861 Warsaw  
burned, November 22.

1861 Battle at  
Salem, December 3.

1861 Battles at  
Shawnee  
Mound and Mil-  
ford, December  
18.

1861 Ordinance  
of secession passed  
at Neosho by a  
minority gather-  
ing of the legis-  
lature.

1862 Execution of  
eight men at Pal-  
myra by General  
McNeil in Feb-  
ruary.

1862 Battle at  
Kirkville,  
August 6.

CARNEGIE  
LIBRARY,  
JOPLIN.

MISSOURI  
CHRONOLOGY

The State Superintendent of Public Schools has the duty of promoting the efficiency of the public school system of the State. He exercises supervision over the educational funds; has authority to grant teachers' certificates; he is required to spend annually at least five days in each congressional district, conferring with and advising the local boards of education and other school authorities. He makes an annual report of the condition of education in the State.

1862 Battle of  
Lone Jack,  
August 15.

The State Board of  
the Governor, Secretary  
General and the Sup  
lie schools. The  
to exercise gen

Education consists of  
of State, Attorney-  
erintendent of Pub-  
board is required  
eral supervision  
over the en-  
tire educa-  
tional interests  
of the State.

A State Li-  
brary Board,  
consisting of  
the State Su-  
perintendent of  
Public Schools,



TRAINING SCHOOL FOR BOYS, BOONVILLE.

1862 Battle of  
Newtonia in Sep-  
tember.

*ex officio*, and four members appointed by the State Board of Education for terms of four years, recommends lists of books for school libraries and fixes by contract with publishers a stipulated price at which such books shall be furnished to school district boards of education.

1863 Battle of  
Springfield.

The University of Missouri is the State institution of higher education. Its government is vested in a board of nine curators appointed by the Governor with the consent of the Senate for terms of six years each. It embraces the following departments: graduate, academic, education, law, medical, military, agriculture, engineering, experiment station—all located at Columbia, and the school of mines and metallurgy located at Rolla.

1863 Emancipation  
Ordinance passed.

In addition to the Department of Education or Teachers College of the University of Missouri, normal instruction is provided for by three State Normal Schools, located at Kirksville, Warrensburg, and Cape Girardeau respectively. Lincoln Institute at Jefferson City is a State institution for the normal, industrial and collegiate instruction of colored students. The government of each of these institutions is vested in a board of seven regents, six of whom are appointed by the Governor with the consent of the Senate for terms of six years, the seventh being the State Superintendent of Public Schools, *ex officio*.

1863 John B.  
Henderson and  
B. Gratz Brown  
elected United  
States Senators.

A Bureau of Geology and Mines is located at the School of Mines at Rolla. Its government is vested in a board of managers, consisting of the Governor, *ex officio*, and four members appointed by him with the consent of the Senate for terms of four years. The board appoints the State Geologist and superin-



AT THE MISSOURI STATE FAIR, SEDALIA—  
AGRICULTURAL, HORTICULTURAL, SHEEP, SWINE AND POULTRY BUILDINGS.

tends the geological survey of the State.

The State Historical Society of Missouri is located at the University of Missouri at Columbia. Its duty is to collect and preserve material pertaining to the history of the State and to conduct a library of historical reference. It is a trustee of and holds all of its property for the State. Its government is vested in an executive committee, consisting of the Governor, Secretary of State, President of the State University, president and secretary of the society, *ex officio*, and twenty-six trustees elected by the society.

The State Library is located at the State Capital. It is chiefly a library of legal reference and is under the supervision of the Supreme Court, which appoints a librarian who holds office during its pleasure.

The Missouri State Board of Agriculture consists of the Governor, Dean of the College of Agriculture of the University of Missouri, and the Superintendent of Public Schools, *ex officio*, and of one member from each congressional district appointed by the Governor for a term of three years. It has supervision over the agricultural interests of the State and is charged with the enforcement of the laws regulating the sale of imitation milk and cream. It appoints a salaried secretary of the University of Missouri, who is also the director of agriculture and takes measures to improve agriculture.

MISSOURI  
CHRONOLOGY

1864 Price's Raid  
through Missouri

1864 Price's Raid  
through Missouri

1864 Price's Raid  
through Missouri



COLONY FOR FEEBLE MINDED, MARSHALL.

MISSOURI  
CHRONOLOGY

Agriculture is, *ex officio*, Board of Directors of the State Fair, which is held annually at Sedalia.

The Missouri State Horticultural Society and the Missouri State Poultry Association are organized for the purpose of promoting the advancement of the interests of the State in their respective fields. The affairs of each organization are administered by an executive board consisting of the Governor, *ex officio*, and of the president, vice-president, second vice-president, secretary and treasurer, elected by the members of each organization.

1864 Thomas C. Fletcher elected governor.

A Fruit Experiment Station is located at Mountain Grove. Its government is vested in a board of three trustees appointed by the Governor with the consent of the Senate for terms of six years. The Agricultural Experiment Station, located at Columbia, is a part of the College of Agriculture of the University of Missouri.

1865 Constitutional Convention held in St. Louis.

The Fish Commission of Missouri consists of five members appointed by the Governor for terms of four years. It is their duty to take measures for stocking the waters of the State with edible fish. A Game and Fish Warden is appointed by the Governor for a term of two years and is charged with the enforcement of the game and fish laws of the State.

1865 Agricultural Department of the State University established.

The Board of Railroad and Warehouse Commissioners consists of three members elected for terms of six years. They are charged with the administration of the laws regulating railroads and public warehouses. The board appoints a chief inspector of grain.

1867 Charles D. Drake elected U. S. Senator.

A Beer Inspector is appointed by the Governor with the consent of the Senate for a term of four years. It is his duty to inspect all beer manufactured or sold in the State and to determine whether the materials from which it has been brewed are such as are authorized by law. A fee is charged of one cent for each gallon, and two cents additional for each package inspected, the revenue, which amounts to a considerable sum, going into the State treasury.

1867 Asiatic cholera prevailed along the Missouri river.

Inspectors of Petroleum are appointed by the Governor for St. Louis, Kansas City, St. Joseph, Hannibal and for such other cities and townships as have petitioned therefor. The term of office is two years. The inspector retains the fees collected for such inspection except in St. Louis where he is required to pay annually into the State treasury all fees collected over the sum of \$7,000 which he is allowed to retain for his compensation and for the expenses of his office.

1867 Missouri Press Association organized May 17, at St. Louis.

The inspection of commercial fertilizers and the enforcement of the laws governing the same are placed under the charge of the Agricultural Experiment Station at Columbia. Inspection of imitation butter and skim-milk cheese is under the supervision of the Board of Agriculture. Inspection of bakeries is under the charge of the labor commissioner.

The Bureau of Labor Statistics and Inspection of Factories, Mines and Workshops is under the charge of a commissioner of labor and inspection ap-

pointed by the Governor with the consent of the Senate for the term of two years. It is his duty, in addition to collecting and reporting respecting the condition of labor and industries of the State to inspect all manufacturing establishments and enforce the laws relating thereto, and to organize and maintain in each city containing more than 100,000 inhabitants a free public employment bureau. A Factory Inspector is appointed by the Governor with the consent of the Senate for a term of four years. It is his duty to secure the inspection of factories and to enforce all the laws relating to the same.

The Bureau of Mines, Mining and Mining Inspection is under the charge of three mine inspectors appointed by the Governor. It is their duty to see to the enforcement of the laws enacted for the health and safety of men in the mines, and to report statistics of the mines of the State. The State Board of Coal Mining consists of three members appointed by the Governor for terms of two years. It is the duty of the board to examine and pass upon the qualifications of persons seeking certificates of competency as mine managers, foremen, engineers, etc.

The State Board of Mediation and Arbitration consists of three members appointed by the Governor with the consent of the Senate for terms of three years. It is the duty of the board to effect settlements by mediation or arbitration of all controversies between an employer and ten or more employees.

The State Board of Health consists of seven members appointed by the Governor with the consent of the Senate for terms of four years. The board has general supervision over the health and sanitary interests of the State, and may quarantine infected districts. It conducts examinations for all persons desiring to practice medicine, surgery or mid-wifery and issues licenses to such as possess the requisite qualifications. Other boards for the examination, licensing and registration of persons practicing professions or engaged in occupations, are the Board of Osteopathic Registration and Examination, the State Board of Dental Examination, the State Board of Embalming, State Board of Pharmacy and State Board of Examiners for Barbers. The first three boards consist each of five members appointed by the Governor for terms of five years; the latter two boards consist each of three members appointed by the Governor for terms of three years, the consent of the Senate being necessary for the appointment of members of the Board of Pharmacy.

Persons are licensed to practice law by the Supreme Court, Courts of Appeals, and circuit courts, and upon graduation from the law department of the University of Missouri or from one of several other law schools in St. Louis and Kansas City.

Persons are licensed to teach in the public schools upon graduation from the department of education of the University of Missouri or from either of the State Normal Schools or after examination by the State Superintendent of Public Schools or the County Commissioner of Schools.

The State Board of Charities and Corrections consists of the Governor,

## MISSOURI CHRONOLOGY

1868 Joseph W. McClurg elected governor.

1868 Monument to Thomas H. Benton unveiled in Lafayette Park, St. Louis.

1869 Carl Schurz elected U. S. Senator.

1869 Foundation of Eads bridge laid at St. Louis.



CONFEDERATE HOME, HIGGINSVILLE.



SCHOOL FOR THE DEAF AND DUMB, FULTON.

MISSOURI  
CHRONOLOGY

*ex officio*, and of six members appointed by him with the consent of the Senate for terms of six years. It is charged with the investigation of the whole system of public charities and correction and the collection and publication of information relating thereto.

1870 B. Gratz  
Brown elected  
governor.

The eleemosynary institutions of the State are the four State hospitals for insane persons, located at Fulton, St. Joseph, Nevada and Farmington respectively; the Missouri Colony for the Feeble Minded and Epileptic at Marshall; Missouri School for the Deaf at Fulton; Missouri School for the Blind at St. Louis; Confederate Soldiers' Home at Higginsville; Federal Soldiers' Home at St. James; the Missouri Training School for Boys at Boonville; and the Industrial Home for Girls at Chillicothe. The management of each of these institutions is vested in a board of managers consisting of five members appointed by the Governor with the consent of the Senate for terms of four years.

The State Penitentiary is located at Jefferson City and is under the general control of a warden appointed by the Governor with the consent of the Senate. The State Treasurer, State Auditor, and Attorney-General are *ex officio* inspectors of the Penitentiary and are required to visit and examine the same, and to enact and enforce rules for its management.

1870 Ex-Governor  
King died.

The Superintendent of the Insurance Department is appointed by the Governor with the consent of the Senate for a term of four years. It is his duty to examine the condition of insurance companies, authorize them to transact business in the State, and see to the enforcement of laws in relation to insurance.

The Bureau of Building and Loan Supervision is in charge of a supervisor appointed by the Governor with the consent of the Senate for a term of four years. He is charged with the examination of building and loan associations and the enforcement of the laws relating to the same. The examination of State banks and trust companies is under the charge of the Secretary of State.

1871 Francis P.  
Blair elected  
senator in place  
of Charles D.  
Drake, resigned.

The Commissioners of Public Printing are the Secretary of State, State Auditor, and State Treasurer. They let contracts and exercise a supervision over the printing and binding for the State.

The Board of Permanent Seat of Government consists of the Governor, Secretary of State, State Auditor, State Treasurer and Attorney-General. It has general supervision and charge of the public property of the State at the Capital. The board appoints a commissioner of the permanent seat of government who exercises control over the public property under the direction of the board.

Special boards and commissioners are created from time to time for the administration of particular matters of a temporary nature. Examples of such commissions are the State Tax Commission and the Board of Commissioners for the Louisiana Purchase Exposition.

1871 Ex-Governor  
R. M. Stewart  
died in St.  
Joseph.



A MISSOURI CORN CRIB.

The judicial power is vested in a Supreme Court, two Courts of Appeals, Circuit Courts, Criminal Courts, Courts of Common Pleas, Probate Courts, Municipal Courts and Justices of the Peace.

The Supreme Court is the highest court of the State. It consists of seven judges, elected for terms of ten years each, the members choosing one of their number as Chief Justice. The court is divided into two divisions,

MISSOURI  
CHRONOLOGY

1872 The Gunn City tragedy in Cass county.

1872 Silas Woodson elected governor.



COURTHOUSE, POSTOFFICE, CITY HALL—  
KANSAS CITY.

ions, one consisting of four judges and the other of three. The latter division has exclusive jurisdiction over all criminal cases, but in all other cases their jurisdiction is concurrent and provision exists for transferring cases to the court as a whole. The jurisdiction of the court is chiefly appellate.

The counties of the State are divided into two districts, over one of which jurisdiction is possessed by the St. Louis Court of Appeals, and over the other by the Kansas City Court of Appeals. Each court consists of three judges elected by the voters of the respective districts for terms of twelve years each. These courts were established for the purpose of relieving the Supreme Court, and they have exclusive appellate jurisdiction, except in cases where the amount involved exceeds \$4,500; in cases involving the construction of the Constitution of the United States, or of Missouri; in cases where the validity of a treaty or statute of an authority exercised under the United States is called in question; in cases involving the construction of the revenue laws of Missouri; in cases involving the title of any office under the State or the title of real estate; in cases where a county or other political subdivision of the State is a party, and in all cases of felony. The excepted cases go directly from the Circuit to the Supreme Court. The Supreme Court and the courts of appeals each appoint a clerk and a marshal.

1873 Lewis V. Bogy elected U. S. Senator.

1874 Charles H. Hardin elected governor.



METHODIST EPISCOPAL CHURCH, SOUTH, SAVANNAH.



MISSOURI  
CHRONOLOGY

1875 Centennial  
Historical  
sketches of many  
counties publish-  
ed.

1875 Francis M.  
Cockrell elected  
U. S. Senator.

1875 Constitution-  
al Convention  
held in Jefferson  
City.

1876 John S.  
Phelps elected  
governor.

The State is divided into thirty-two circuits, in each of which there is elected a circuit judge for a term of six years. In a circuit composed of a single county or city, more than one judge may be elected, but in such event each judge sits separately for the trial of cases. At present Buchanan and Jasper counties elect two, Jackson county five, and St. Louis county eleven circuit judges. In St. Louis eight are judges of the civil division, two of the criminal and one of the juvenile court. A clerk of the circuit court is elected in each county for the term of four years. The circuit courts have original jurisdiction over all civil and criminal cases not otherwise provided for and appellate jurisdiction from inferior tribunals except where it is expressly prohibited from exercising the same.

A special criminal court is provided for the 15th judicial circuit and for each of the counties of Buchanan, Greene and Jackson. Each of these courts possesses the criminal jurisdiction of circuit courts and is presided over by a judge elected by the voters of the circuit or county.

Courts of common pleas are established at Louisiana, Hannibal, Sturgeon, and Cape Girardeau, and are presided over by the judges of the circuits in which they are located, except in Cape Girardeau, where a special judge is elected by the voters of the county.

A court of criminal correction exists in the city of St. Louis with jurisdiction over misdemeanors. It is presided over by a judge elected for a term of four years.

A probate court exists in every county and in St. Louis City. It is presided over by a judge of probate elected by the county or city for a term of four years.

In some of the cities of the State police courts are established with jurisdiction over the violation of municipal ordinances.

Two or more justices of the peace are elected for terms of four years each in every township of the State. They are examining magistrates and have jurisdiction to try misdemeanors. They also have jurisdiction over all actions against



ON THE GASCONADE RIVER.

*Photo by Joc L. Douglass, Columbia.*



railroad companies to recover damages for live stock killed or injured, and over all civil actions where the sum or value of the thing in dispute is limited in amount.

One or more notaries public are appointed by the Governor for a term of four years in each county and city of the State. A notary public has authority to administer oaths, attest signatures, and to take depositions and acknowledgment of documents which shall be received as legal evidence.

The Governor may appoint in any other State or territory of the United States, and in any foreign countries, one or more commissioners, to hold office during his pleasure, who are authorized to attest signatures and to take acknowledgments of documents to be used as legal evidence in this State.

The principle of local self-government is firmly established in Missouri. The constitution provides several local subdivisions of the government and citizens within the respective areas are permitted to manage their own affairs, through their own officials except as regards a few matters that are of general interest to the people of the entire State. In many cases, however, as has been indicated above, local authorities attend to matters of general concern as well as to those of purely local interest. The local units of government are counties, townships, cities, towns and villages, and school districts.

Missouri is divided into 114 counties and one city. The city of St. Louis occupies the unique position of being distinct from any county, whereas all other cities form parts of the counties in which they are situated. Matters which in other cities are attended to by county officials, are provided for in St. Louis by officials of the city.

The chief administrative authority of the county is the county court, consisting of three judges. The county is divided into two districts, each of which elects a county court judge for a term of two years. The voters of the entire county elect a presiding judge who serves for four years.

The other county officers are a judge of probate, clerk of the circuit court, recorder of deeds, clerk of the county court, assessor, public administrator, and surveyor, each elected for a term of four years, and a prosecuting attorney, sheriff, collector, treasurer, coroner, and school commissioner or county school superintendent, each elected for a term of two years. Counties having special

MISSOURI  
CHRONOLOGY

1879 George G.  
Vest elected U.  
S. Senator.

1880 Thomas T.  
Crittenden elect-  
ed governor.

criminal courts and courts of common pleas generally elect clerks of such courts. Buchanan county also elects a county auditor, while Jackson coun-



COURT HOUSE,  
FEDERAL BUILDING,  
GARTH MEMORIAL  
LIBRARY—HANNIBAL.

#### MISSOURI CHRONOLOGY

ty has a county marshal. The clerk of the circuit court is, *ex officio*, recorder of deeds, but in counties having more than 10,000 population the county court may separate the offices, and it is required to do so if the assessed valuation of property in the county exceeds \$15,000,000. Counties having "township organization" do not elect a county assessor or county collector.

There also exists a county board of education, consisting of the county commissioner, one member appointed by the county court and one member appointed by the State board of education, who serve for terms of two years. In counties having county supervision of schools the county school superintendent possesses the functions of the county board of education.

1882 Ex-Governor  
Willard P. Hall  
died at St. Joseph.

There are two kinds of townships in Missouri. The "municipal" township and the "incorporated" township. The municipal township exists in those counties which have not adopted township organization. The county is divided into townships by the county court. In each township there are elected at least two justices of the peace for terms of four years, and one constable for a term of two years. The municipal township has no corporate powers, and is merely an area of administration.

1884 John S.  
Marmaduke  
elected governor.

Provision exists for the organization of a county into incorporated townships, when a majority of voters favor such proposition. Townships so organized are granted certain corporate powers. The officers of such townships are a trustee who is, *ex officio*, treasurer; collector, clerk who is, *ex officio*, assessor; constable, two members of the township board of directors, at least two justices of the peace, and as many road overseers as there are road districts in the township. All of these officers are elected for terms of two years. The principle of township organization has not been well received throughout the State, and only 17 out of the 114 counties are at present organized in this manner.

The State is divided into small districts for school purposes. The districts are either common school districts or city, town or village districts. The affairs of the common school districts are managed by a board of education, consisting of three directors elected, one each year, by the qualified voters at the annual meeting held on the first Tuesday in April. At this meeting the voters have power to determine various matters applying to schools.

1887 Governor  
Marmaduke died  
and was succeeded  
by Lieut.-  
Governor Albert  
P. Morehouse.

In the city, town or village districts, the governing authority is a board of education, consisting of six directors elected, two each year, for a term of six years. A superintendent may be elected by the board to assist it in the school administration. Special provisions exist for the organization of school districts in cities containing more than 50,000 inhabitants.

The State and county school authorities are expected to promote the interests of education in the school districts. A few counties are organized under what is known as "county supervision." In such cases the county school super-

intendent, who takes the place of the county school commissioner, has an effective supervisory control over the educational administration of the county.

Under the constitutions of 1820 and 1865, it was the custom of the legislature to incorporate cities and towns by special acts. General laws were enacted for the regulation of such incorporations, but the localities, as a rule, preferred special charters. This led to an undue interference by the legislature in local affairs, and the constitution of 1875 seeks to prevent this by providing that the General Assembly shall not pass any special law "incorporating cities, towns or villages, or changing their charters." The General Assembly was permitted, however, to establish classes of cities not exceeding four and to enact general laws for the organization of the different classes. The legislature has, accordingly, established four classes, the populations of the cities being the basis of the division, as follows: first class, 100,000 inhabitants or more; second class, 30,000 and less than 100,000 inhabitants; third class, 3,000 and less than 30,000 inhabitants; fourth class, 500 and less than 3,000 inhabitants, and towns with special charters even if they have less than 500 inhabitants. In addition a class of villages is provided for, including all places with less than 500 population, except those incorporated under special charters.

The organization and powers of each class are different, but each city elects a mayor as its chief executive officer, and a legislative body for the enactment of local ordinances, etc. This body is known as the municipal assembly in cities of the first class, and consists of two chambers, a council and a house of delegates. In other cities it consists of one chamber only, and is known as the common council, in cities of the second class; council, in cities of the third class, and board of aldermen in cities of the fourth class. In villages the functions of the council and mayor are performed by the board of trustees and its chairman. Other administrative officers exist in cities, the number and kind depending chiefly upon the population of the city. Some of these are elected and others are appointed by the mayor and heads of departments.

The constitution specially provides that the city of St. Louis or any other city having a population of more than 100,000 may frame and adopt a charter for its own government. Such charter must be in harmony with the constitution and laws of the State. Under the constitution it is necessary that the charter shall provide for a chief executive officer and two houses of legislation, but this provision so far as it affects St. Louis, has been recently changed by an amendment of the constitution, under which the charter could provide for only one house of legislation. St. Louis has not yet taken advantage of this provision and its municipal assembly consists at present of two chambers. Kansas City is the only city besides St. Louis which has framed its own charter under the provisions of the constitution, though St. Joseph has sufficient population to enable it to do so.



"DOWN BY  
THE DUSKY  
ROADSIDE."

#### MISSOURI CHRONOLOGY

1888 David R.  
Francis elected  
governor.

1891 Ex-Governor  
Morehouse committed  
suicide shooting himself  
in the head at home in  
Mauville.

MISSOURI  
CHRONOLOGY

It is necessary to note, however, that cities and towns which were incorporated under special charters before 1875, are not obliged to surrender the same, and some cities are under such charters to-day. Moreover, cities organized under general laws, do

not necessarily come under a new class by reason of the increase of their population to the requisite figure. In all cases it is necessary that a majority of the voters shall declare in favor of such act. Thus St. Joseph, which has more than 100,000 population, is still organized as a city of the second class.

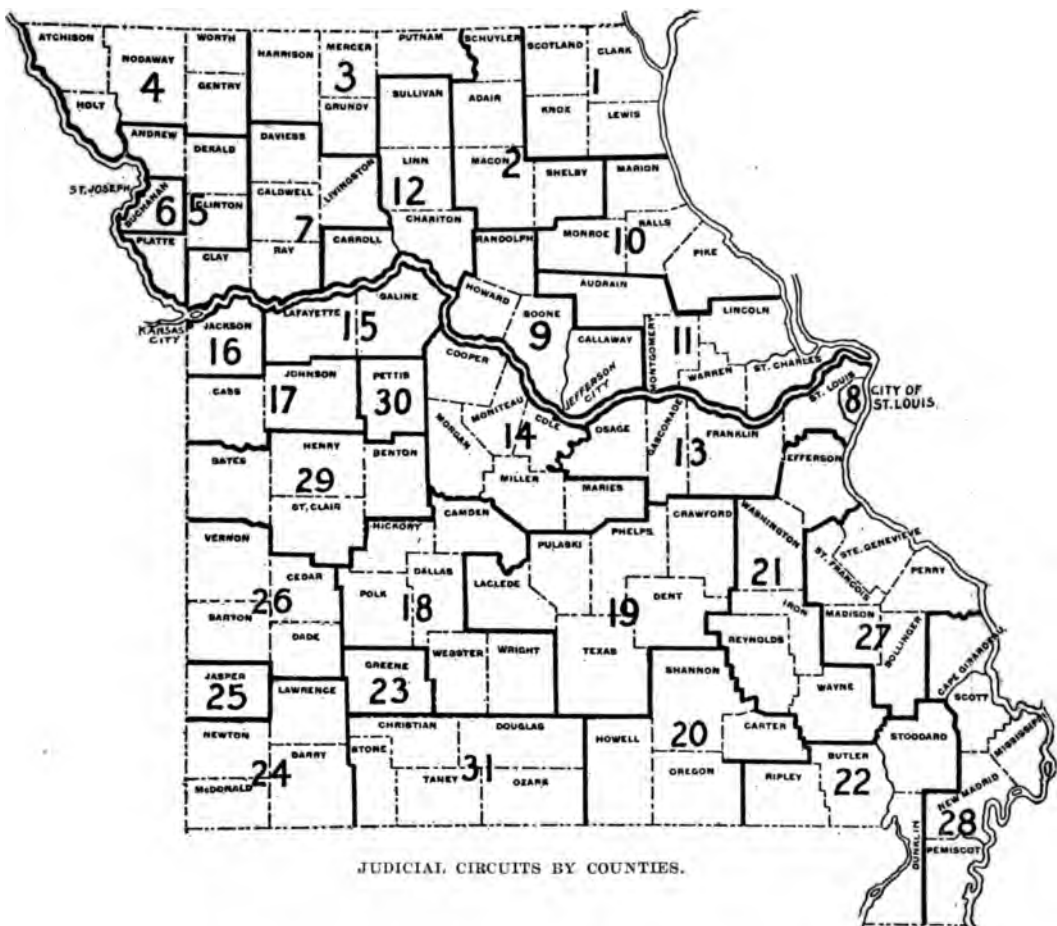
1892 William J.  
Stone elected  
governor.



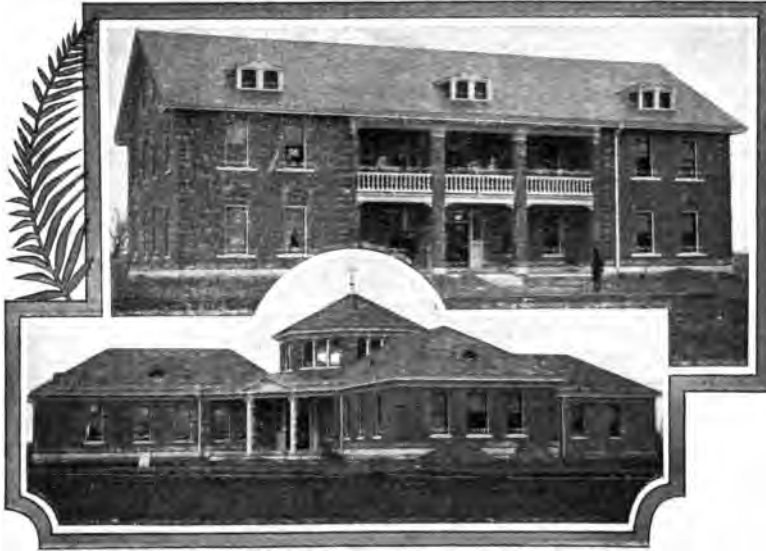
CARNEGIE LIBRARY, CARTHAGE.

Missouri is entitled to two senators and sixteen representatives in Congress. The

General Assembly has divided the State into sixteen congressional districts, each of which elects one representative. St. Louis City contains two congressional districts and part of a third, the balance being made up of St. Louis county. Jackson county constitutes one congressional district, and the other districts are made up of a number of counties.



JUDICIAL CIRCUITS BY COUNTIES.



FEDERAL SOLDIERS' HOME, ST. JAMES, PHELPS COUNTY.

Missouri is in the Eighth Judicial Circuit of the United States and an annual session of the United States Circuit Court of Appeals is held at St. Louis. The counties of the State are divided into an Eastern and Western district, for each of which a United States district judge is appointed. The Eastern District is divided into an Eastern and Northern Division, and the Western District into the Western, St. Joseph, Central, Southern, and Southwestern divisions. Two sessions of the circuit and district courts are held annually in each division. A United States district attorney, assistant district attorney, and a United States marshal are appointed for each judicial district, and clerks of the circuit and district courts are appointed for the respective divisions.

A sub-treasury of the United States is located at St. Louis under the charge of an assistant treasurer.

Three customs districts are established in the State, at St. Louis, Kansas City, and St. Joseph respectively, each of which is under the charge of a surveyor of customs.

Missouri is divided into two internal revenue districts, with headquarters, one at St. Louis and the other at Kansas City. A collector of internal revenue is appointed for each district and deputy collectors are appointed with offices at various ports of the State.

An assay office is located at St. Louis under the charge of the United States Assayer. Custodians of public building and property are appointed for St. Louis, Kansas City, St. Joseph, Springfield, Hannibal, Sedalia, and Jefferson City. Provision has been made by Congress for public buildings at Joplin, Columbia, Moberly, Kirksville, Louisiana, and Nevada.

The State is divided into three United States land districts, with headquarters at Boonville, Ironton, and Springfield respectively. A register and a receiver are appointed for each district. The vacant public lands in Missouri in 1903, amounted to 422,526 acres.

Two of the twelve inspectors in charge of the Post-Office Inspection Service of the United States have headquarters in Missouri—at St. Louis and Kansas City, respectively. One of the six divisions of the rural free delivery service has its headquarters at St. Louis, and is under the charge of a division superintendent.

#### MISSOURI CHRONOLOGY

1895 Pertle Spring  
Democratic Convention, on  
August 6, 1895, the  
free coinage of  
silver a nation  
issue.

1896 Ex-Governor  
Silas Woodsor  
died in St. Joseph.

1896 Lon V.  
Stephens elected  
governor.

MISSOURI  
CHRONOLOGY

The Northern Division of the United States Army, embracing the departments of the Lakes, Missouri and Dakota, has its headquarters at St. Louis and is under the command of a major-general. Jefferson Barracks, a military reservation of the United States, is located near St. Louis.

The Mississippi River Commission, which has control of the improvement of the Mississippi river, has its chief office in St. Louis, under the charge of the Secretary of the Commission. The Supervising Inspector of the Fourth Steamboat Inspection District of the United States, has his office in St. Louis.

Stations of the Weather Bureau are located at St. Louis, Kansas City, Columbia, Hannibal, and Springfield, and a Fish Culture Station of the United States Bureau of Fisheries, is located at Neosho.

The great seal of Missouri consists of a representation of the coat of arms of the State. The latter device was adopted by the First General Assembly after the admission of Missouri into the Union, and has not been modified since that time. The seal is in circular form and is two and a half inches in diameter. It consists of a circular shield, divided into two equal parts by a perpendicular line; on the right is a grizzly bear of Missouri in a red field, above which is a silver crescent in an azure field; on the left, in a white field, are the arms of the United States. Around the shield is a circular band on which are the words: "UNITED WE STAND, DIVIDED WE FALL." For the crest, over a full-faced helmet grated with six golden bars, is a silver star, and above it a constellation of twenty-three smaller stars, representing respectively, Missouri and the twenty-three other States which formed the Union at the time this State was admitted.

The supporters are a grizzly bear of Missouri on each side of the shield standing on a scroll, inscribed with the motto of the State, *Salus Populi Suprema Lex Esto*. Under the scroll are the numeral letters "MDCCCXX," representing the year in which the first constitution of the State was adopted. Around all is a circular scroll, inscribed with the words: "THE GREAT SEAL OF THE STATE OF MISSOURI."

The political institutions of Missouri, which had their origin in the results of the experiences of the older commonwealths, have been gradually developed in accordance with the needs of the people of the State, and serve to-day for the government of a population of nearly 3,500,000. Under this government the equality of all persons before the law has been established, the personal and property rights of every individual have been rendered secure, educational and charitable institutions have been promoted and the agricultural industry and commercial interests of the State have achieved a development which is equalled by few of the States of the Union. While mistakes have not always been avoided, the thoughtful citizen may reflect with pride that the history of his government, during the eighty-three years in which

Missouri has been a member of the Union, marks a distinct approach towards the realization of the motto of the State:—*Let the welfare of the people be the supreme law.*

FEDERAL BUILDING,  
JEFFERSON CITY.

1899 Convention at St. Louis, called by Gov. Lon V. Stephens proposes the holding of a Louisiana Purchase World's Fair.

1899 State Historical Society of Missouri organized at Columbia.

AN EXCELSIOR SPRINGS  
PARK SCENE.

1900 A. M. Dockery elected governor.





**THE EXECUTIVE DEPARTMENT.**

**A. M. DOCKERY, Governor.**

**T. L. RUBEY, Lieutenant-Governor.**

**SAM B. COOK, Secretary of State.**

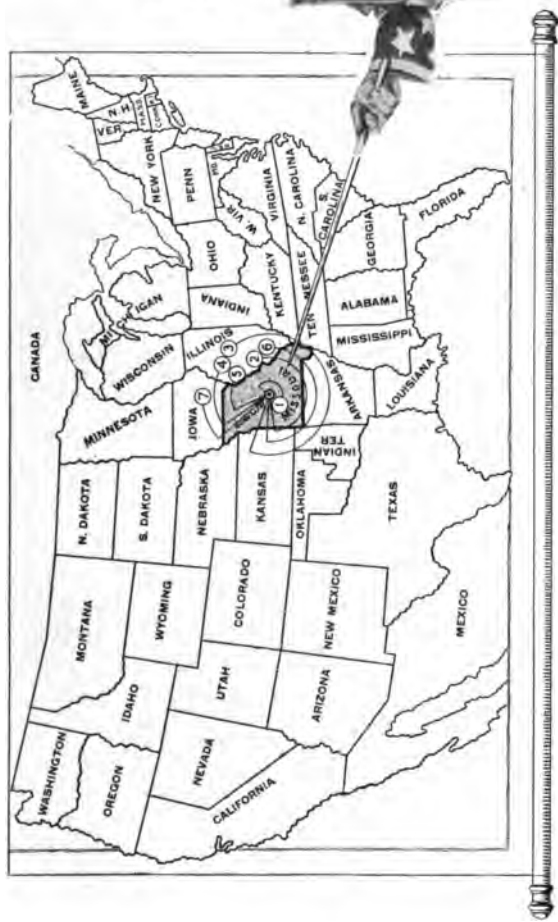
**ALBERT O. ALLEN, State Auditor.**

**E. C. CROW, Attorney-General.**

**R. P. WILLIAMS, State Treasurer.**

**W. T. CARRINGTON, Superintendent of Public Instruction.**



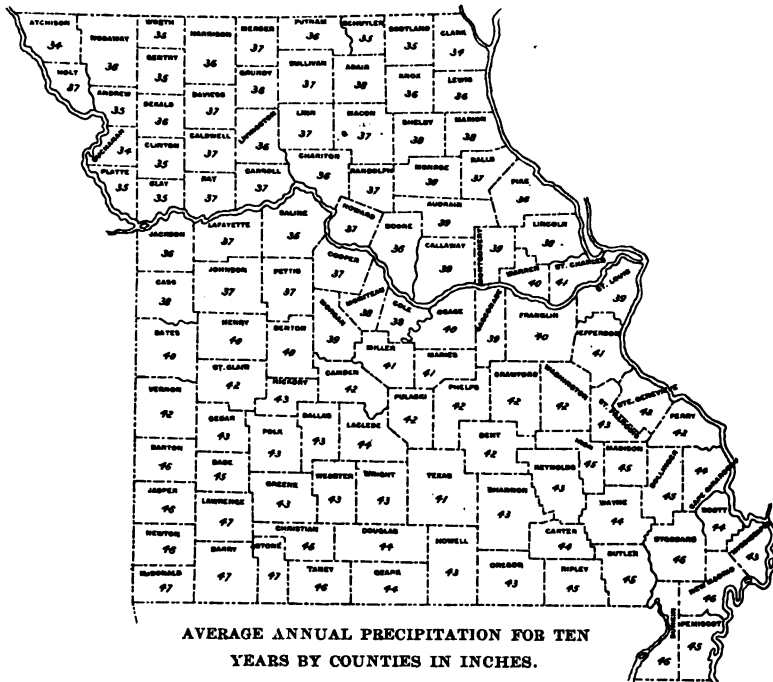


WITHIN 250 miles of the capital of Missouri, in 1900, were: First, the center of the total farm acreage of the United States; second, the center of corn production; third, the center of farm value; fourth, the center of the improved farm acreage; fifth, the center of the production of the six leading cereals; sixth, the center of the gross income from farms; seventh, the center of oat production; also within the center, but not shown on the map, was the center of wheat production. In 1904 the center of each was nearer the capital of Missouri and all, with possibly two exceptions, are now within the limits of this State. The statistics are from the Twelfth Census of the United States.



## THE STATE OF MISSOURI.

Average mean  
temperature for  
the year, 54  
degrees.



Five inches greater  
rain fall than  
Kansas

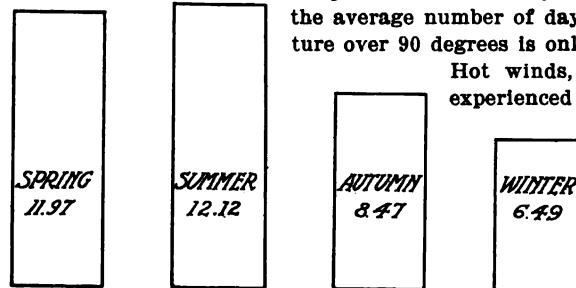
Illinois 26.5. It will be noticed that the January temperature in Missouri is higher than in any of its neighboring states or in the states in the same latitude to the eastward. The annual mean temperature is also higher in Missouri than in any of these States. Where in Iowa it is 47.2 and in Illinois 51.9, in Missouri it is 54.3 degrees.

The average temperature for the State for each month in the year is as follows: January 30; February 30; March 41.8; April 55.4; May 65.1; June 73.8; July 77.5; August 76.2; September 68.6; October 57.5; November 43.3 and December 33.

Periods of extreme cold are of short duration and the temperature seldom falls lower than 5 to 10 degrees below zero. During the summer months the temperature occasionally reaches 90 to 95 degrees, but the average number of days with maximum temperature over 90 degrees is only 34 for the entire State.

Hot winds, such as are occasionally experienced in Kansas and Texas, are unknown.

The average date of the last killing frost in spring varies from March 30, in the southern section of the State to April 16, in the northern, the first killing frost in autumn from October 29 to October 13.

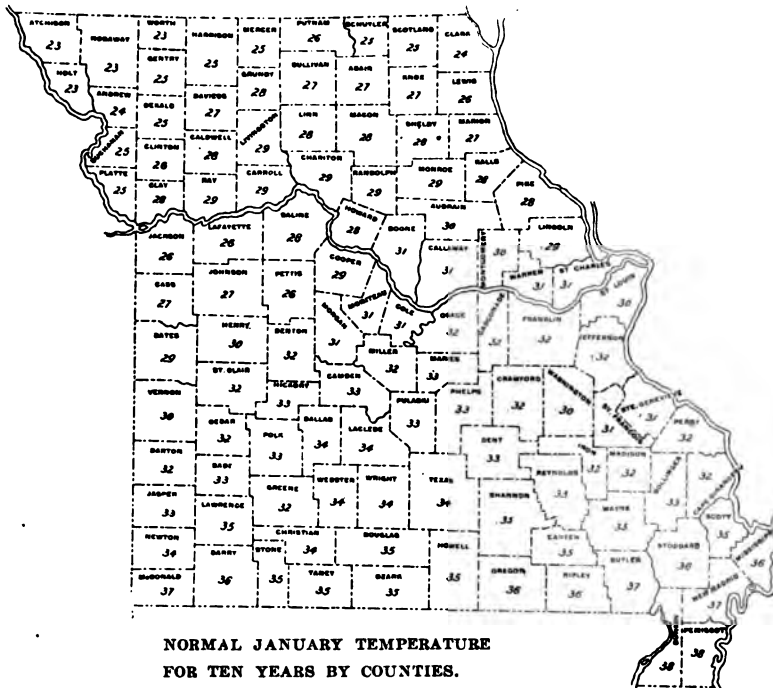


Precipitation general  
throughout State.

### *Distribution of Rainfall in Missouri by Seasons.*

tober 13. The length of the seasons in days varies from 179 to 210 in the various counties.

The average annual precipitation, computed from the federal government records for the last ten years, ranges from 34 inches in the northwestern to 46 inches in the southeastern counties, the average for the State being 39.05. In

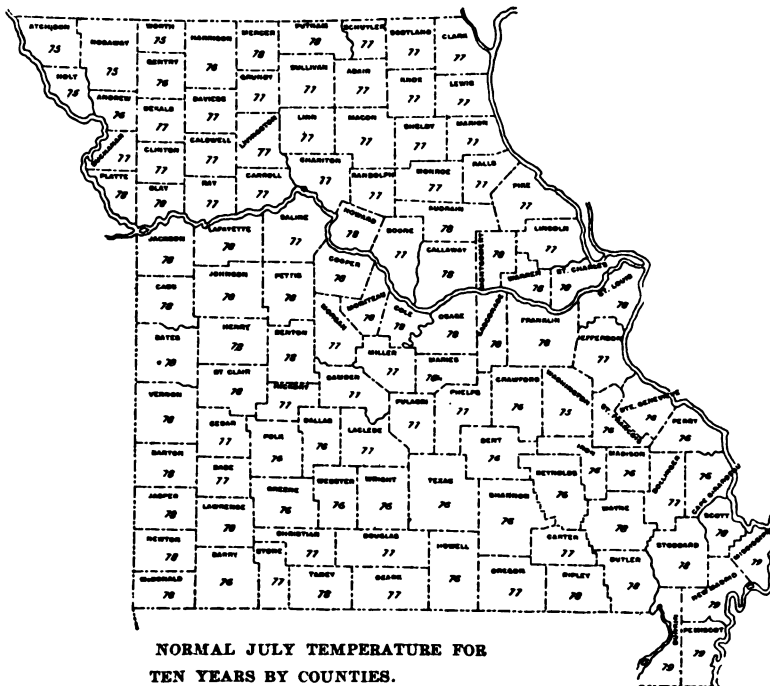


**Periods of cold of short duration.**

**Long crop season.**

twenty years the precipitation has never exceeded or been less than the normal 5 inches except three years each.

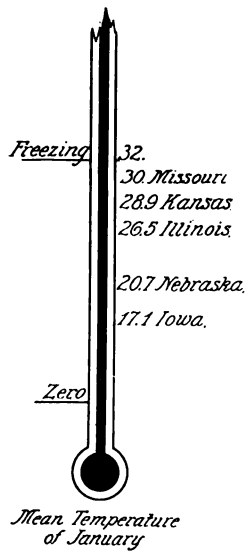
The distribution of rainfall throughout the year is highly favorable to the farmer, the average for the State for the different seasons being as follows:



**Distribution of  
rain fall highly  
favorable.**

Snow rarely earlier  
than November  
fifteenth.

Prevailing south-  
erly winds.



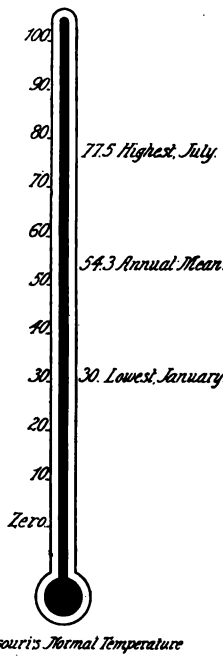
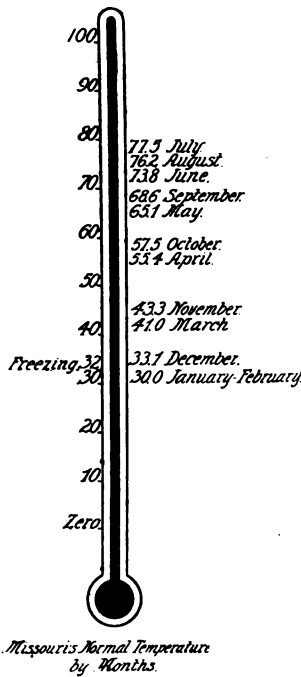
Spring 11.97 inches; summer 12.12; autumn 8.47; winter 6.49. The wettest months are May 4.95 and June 4.78 while the driest are December 2.23, January 2.04, and February 2.22 inches.

The average crop season precipitation—March to September, inclusive—is 27.65 inches. This is three inches greater than that of Illinois; five inches greater than that of Kansas; seven inches greater than that of Minnesota and eight inches greater than that of Nebraska.

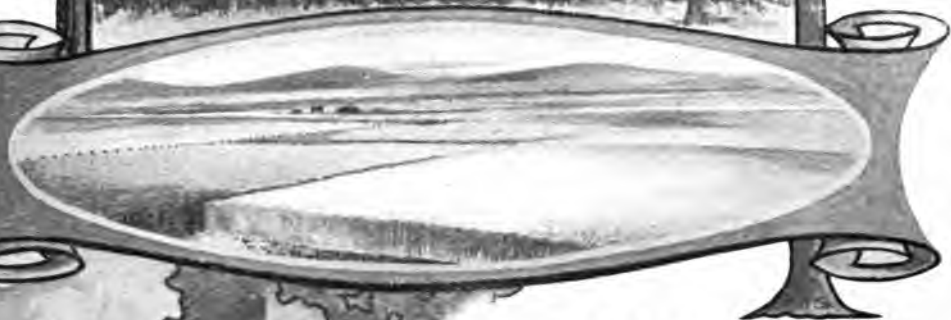
From November to March inclusive, the precipitation is usually general in character, but during the summer months the greater part occurs as local showers. Rainfalls of from 2 to 3 inches in twenty-four consecutive hours occur in some portion of the State nearly every month but falls of more than 4 inches in twenty-four hours are rare. The average number of rainy days, in which a tenth of an inch or more of precipitation occurs is—8 in January, 9 in February, 10 in March, 11 in April, 12 in May, 11 in June, 9 in July, 7 in August, 9 in September, 8 in November and 9 in December.

The prevailing winds are southerly, although during the winter months north-westerly winds prevail a considerable part of the time. The average hourly wind velocity ranges from 5 to 10 miles during the summer and from 8 to 10 miles during the winter months.

Snow rarely falls earlier than November 15 nor later than April 15. The average seasonal snow fall ranges from 8 inches in the southeastern portion of the State to 30 inches in the northwest.



# GEOLOGY AND PHYSIOGRAPHY



**M**ISSOURI has within her boundaries a greater variety of natural features than any of the adjoining States except Kentucky, Tennessee, and Arkansas. These features vary not only in detail but in general character. The accompanying map shows two topographic divisions—sometimes called the Ozark and the prairie region—more prominent than the others. The northern and western parts of the State are mainly smooth, the southern part mainly rough. The roughness or smoothness is the expression of the depth and width of valleys cut into a plain. The depth of a valley depends upon the elevation of the country in which it has been cut, and its width compared with that of other valleys in the same region depends upon the size of the stream that has made it, the time the stream has been at work and the hardness of the rocks in which it has been cut. In the southern part of the State—the Ozark region—the valleys are all cut in limestones, which are rather hard rocks, while in the northern part the valleys are cut in soft shale. The southern part of the State was higher also when the streams began to cut their valleys than the northern part. The valleys in the southern part of the State, at least those in the Ozark region, are relatively narrow and deep; those in the prairie region are broad and shallow. Occasional limestone beds in the north and occasional softer rock in the south produce small areas of smooth country in the rough region and small areas of rough country in the smooth region. There is no sharp line separating these two regions from each other. In a general way the dividing line follows the Missouri river from its mouth to the vicinity of Miami; thence it runs southward to Windsor and thence southwestward to where

General  
character-  
istics of  
Missouri  
topogra-  
phy.

Features  
of the  
Ozark  
region.





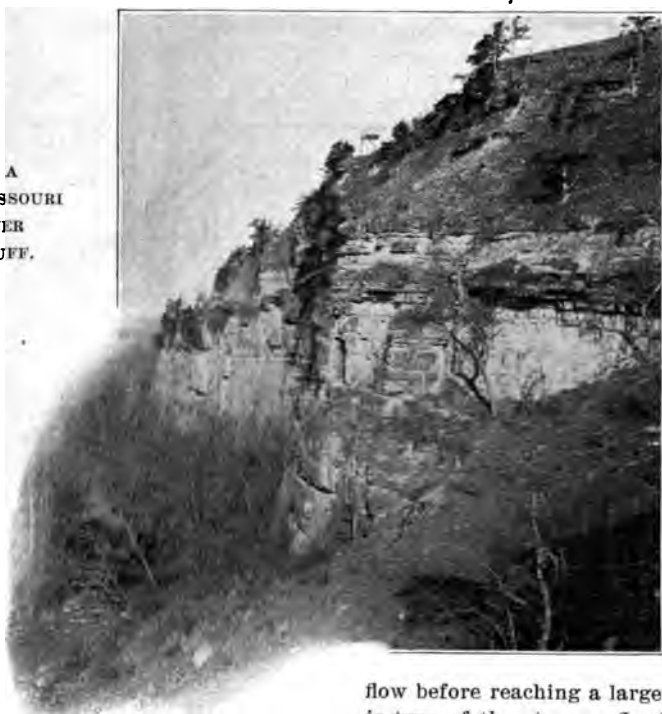
ATCHISON COUNTY LANDSCAPE.

Spring river crosses the State line. South and east of this line lies the Ozark region, north and west of it the prairie region.

Valleys of the  
Ozark region.

The general shape of the Ozark region is that of an elliptical dome, being highest along the central line, reaching a maximum height at one locality and sloping downward in all directions from this, more rapidly at right angles to the axis of the ellipse and less rapidly along the axis. The axis of this ellipse runs from the Mississippi river in Ste. Genevieve county southwestward to the State line near the southwestern corner of Stone county.

ON A  
MISSOURI  
RIVER  
BLUFF.



The elevation of the country around the foot of the Ozark region is about 800 feet above sea level. The elevation of the top along the central part of the axis varies from 1,400 to 1,700 feet. From the line of greatest elevation the drainage runs northward to the Osage and Missouri rivers, which flow parallel to the axis of the Ozark region on one side and southward to White river on the other.

All the streams have cut valleys of greater or less depth. Toward the heads of the streams that flow northward, i. e., just north of the central axis, the valleys are shallow and usually rather wide on account of the small size of the streams and the great distance they

flow before reaching a large river. The same characteristic is true of the streams flowing southeastward on the south side of the axis—those east of the central part of Howell

county. The streams that flow southward from the western part of the Ozark region have cut deep, narrow gorges from their heads. All the Ozark valleys reach a maximum depth in the region about midway between the central axis







ATCHISON COUNTY LANDSCAPE.

Spring river crosses the State line. South and east of this line lies the Ozark region, north and west of it the prairie region.

Valleys of the  
Ozark region.

The general shape of the Ozark region is that of an elliptical dome, being highest along the central line, reaching a maximum height at one locality and sloping downward in all directions from this, more rapidly at right angles to the axis of the ellipse and less rapidly along the axis. The axis of this ellipse runs from the Mississippi river in Ste. Genevieve county southwestward to the State line near the southwestern corner of Stone county.

ON A  
MISSOURI  
RIVER  
BLUFF.



The elevation of the country around the foot of the Ozark region is about 800 feet above sea level. The elevation of the top along the central part of the axis varies from 1,400 to 1,700 feet. From the line of greatest elevation the drainage runs northward to the Osage and Missouri rivers, which flow parallel to the axis of the Ozark region on one side and southward to White river on the other.

All the streams have cut valleys of greater or less depth. Toward the heads of the streams that flow northward, i. e., just north of the central axis, the valleys are shallow and usually rather wide on account of the small size of the streams and the great distance they

flow before reaching a large river. The same characteristic is true of the streams flowing southeastward on the south side of the axis—those east of the central part of Howell county. The streams that flow southward from the western part of the Ozark region have cut deep, narrow gorges from their heads. All the Ozark valleys reach a maximum depth in the region about midway between the central axis







RELIEF MAP OF THE UNITED STATES SHOWING THE POSITION OF THE STATE OF MISSOURI.

and the border of the region. So far as ruggedness of the country is concerned, the central part of the Ozarks is not extremely rugged, though it is rather high. Around this is a region that is much more rugged; the valleys are deeper and narrowed; the country is completely cut up with an innumerable number of deep ravines, though the general elevations are not so high as in the central region. Around this intermediate belt of rough country is a belt that is both less rugged and lower than the preceding one. This is the border of the region and it slopes down to the prairies.

Main features of the prairie region.

The prairie region is lowest along the border line between it and the Ozark region and rises gradually westward, or slightly northwestward. Along the southern and southeastern border of the region the elevation varies from 600 to 800 feet above sea level. In the northwestern part of the State the elevation is about 1,200 feet.

There are two divisions of the prairie region, both of which rise northwestwardly. In one of them, the southerly area, the rise is not uniform. It takes place in a series of steps which are successively higher westward, with a slight gradual rise between each step. The trend of the steps is northeastward and southwestward. In the part of the prairie region lying south of the Missouri river there are two of these steps, one of which does not extend into north Missouri. North of the river there is only one of these steps that is prominent, but there are several minor ones. This region is also cut up into valleys by the rivers that drain it. Excepting, however, a belt of country a few miles wide along the edges of the steps, the valleys are not deep and narrow, and even here they do not reach the depth attained by the valleys of the Ozark region. In the other division the country rises nearly uniformly northwestward. The terraces or steps which characterize the southerly area are here buried deep beneath a

Valleys of the prairie region.

Found at  
Mine La  
Motte



MISSOURI'S OLDEST  
INHABITANT.



GENERALIZED CROSS SECTION ACROSS MISSOURI FROM NORTHWEST TO SOUTHEAST.

## Soils of Missouri.

superficial layer of clay, gravel and sand, so they are not recognizable factors in the topography of this division. The map shows the areas of those divisions.

The rivers of north Missouri flow either into the Missouri or the Mississippi. Those flowing into the Missouri have a southerly course, usually almost due south, while those flowing into the Mississippi flow southeastwardly. The valleys of the larger streams are often five miles or more in width, with flat, meadow-like floors over which the stream channels wander in meandering courses. The intermediate country is undulating and rarely too steep for cultivation.

The soils of Missouri, considered from the point of view of their origin, are of two general kinds. The southern part of the State is covered with a residuary soil, or a soil that has resulted from the decomposition of the native rocks, while the northern part of the State is covered with a transported soil, one that was brought from elsewhere, of glacial origin. The dividing line runs a few miles south of the Missouri river, from the western line of the State to the vicinity of Boonville; thence eastward the river may be considered, in a general way, as a dividing line.



A LUMP OF  
MISSOURI  
COAL  
PUTNAM  
COUNTY



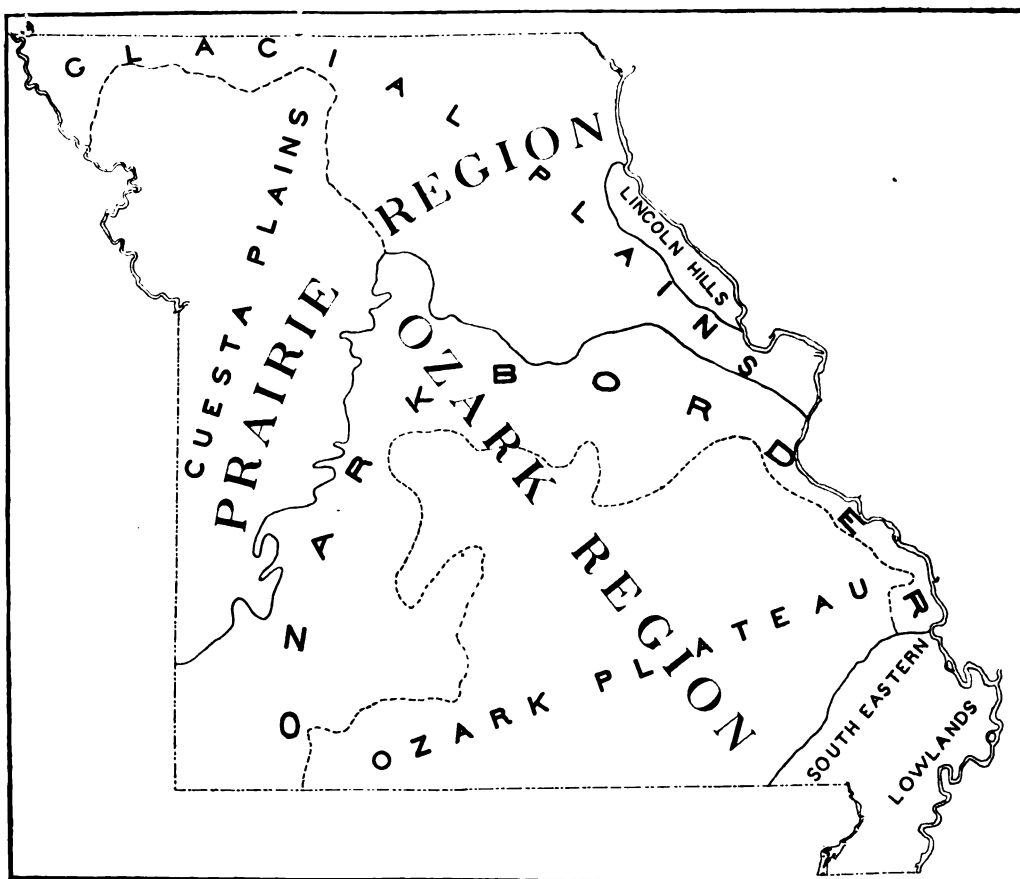
FISHING SPRING, NEAR STEELVILLE



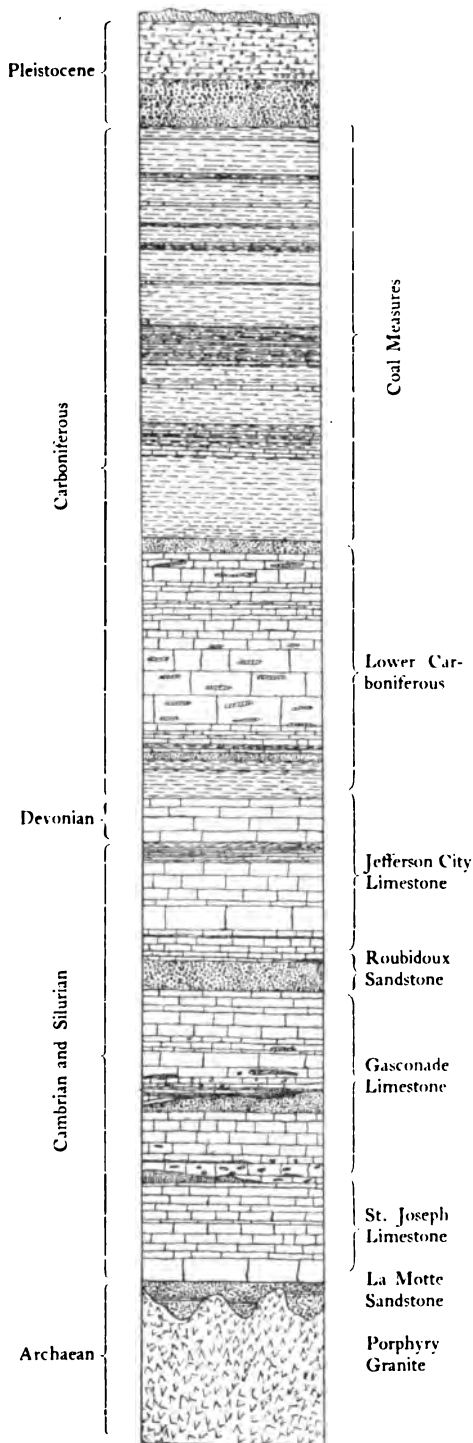
HA HA TONKA LAKE, CAMDEN COUNTY.

Soil and rock affect the stability and quality of the water supply. In the Ozark region water is obtained from wells and excellent springs; shallow wells in the loess soils and deeper ones in the clay soils furnish abundant water supply. Stock water is plentiful and can be readily stored in surface basins. The

Plentiful  
water supply.



SKETCH MAP OF MISSOURI SHOWING AREAS OF PRINCIPAL  
PHYSIOGRAPHIC REGIONS.



GENERALIZED SECTION OF  
MISSOURI STRATA.

rocks in Missouri nowhere contain any considerable quantity of matter tending to make the water unwholesome.

Using the word rock in its geological sense, the Missouri rocks are mainly sedimentary, formed by the settling into beds of masses of sediment, and igneous, formed by solidification from a molten condition.

The igneous rocks are of two kinds, granites and porphyries. Enough granite, usually pinkish in color, is exposed for an inexhaustible supply for commercial purposes. It has been quarried for years for building and ornamental stones and paving. Porphyry of varying colors, equal to that in the ancient Roman temples, exists in large quantities.

The sedimentary rocks are of two main groups. One is composed of limestone formed while Missouri was not only covered by water, but was far from any land area. Four-fifths of the State south of the Missouri river and much of it north of the river, is underlaid with these limestones. The other groups of rocks were formed when Missouri was either part of a continent or covered by a shallow sea near land.

The rocks of the earth's surface may also be classified according to age. Three of the four general ages, Cenozoic, Mesozoic, Palaeozoic and Azoic, are represented in Missouri, and eight or nine of the subdivisions of the ages. If all of these formations were superimposed at any one place they would build a column 3,500 feet high from the top of the granites. The thickness of the lower layer is unknown. The rocks do not all underlie the whole State, but by the bowing up of beds or by cutting through of streams they are brought to the surface at various places. The oldest rocks are in Iron and surrounding counties. The center of the rock beds which underlie the larger part of Missouri, Kansas, Arkansas, Illinois, and Iowa, which contain the natural resources from which these States draw their wealth, is in Iron county, Missouri.

A geological map divides the rocks into groups, each group usually including more than one kind of rock or more than one formation. On the geological map of the State, the granites and porphyries are shown in solid red color. They are found in south and southeastern Missouri. A long period later with the coming of the sea over the Missouri area brought first the La Motte sandstone. Gradually the land sank beneath the sea and extensive St. Joseph limestone was formed on the shallow bottoms. This limestone is usually gray and of rather coarse crystalline texture. It is comparatively free from flint and decomposes readily to a fertile and easily-tilled red clay soil.

Great deposits of disseminated lead have been found in this formation. The Gunter sandstone, the Gasconade limestone, and Roubideaux sandstone were formed subsequently. Passing outward from the Archaean core of Missouri is next found the Jefferson City limestone. Its predominant rocks are the thickly-bedded, soft, white, non-crystalline "cotton rock" and the heavily-bedded, slightly-crystalline gray limestone called "spotted rock." Along the eastern side of the Ozark region is the Crystal City sandstone, a bank of pure white sand extensively quarried for glass-making and foundry purposes. The Marshfield sandstone in the southwest and the Eureka limestone in the eastern and northeastern Ozark region decompose to a pale-reddish or yellowish soil.

Physical charact  
of some  
Missouri rock

Younger formations are the Trenton limestone; the thin Devonian rocks around the Ozark region; the Louisiana limestone, fine grained and nearly 98 per cent pure carbonate of lime; the Hannibal shale, usually yellowish drab or greenish, with a small per centage of fine sand; the St. Louis, Keokuk, Burlington and Chouteau limestones, forming a bank around the Ozark region from Perry county to the extreme southwest; the Auxvasse sandstone, the Kaskaskia limestone and the Chester shales, found in a restricted area on the eastern side of the Ozark region, which close the deposits up to the period of the coal.

After this deposition the area of Missouri closed its marine history. It was under the sea at various times thereafter, but for short periods only, and the later stratified rocks of Missouri are made up of land material. The first formation was a series of sand and clay beds, called the Cherokee shales. This

was probably deposited around an Ozark island. The coal beds of practically all the central and southwestern coal-producing counties are in this formation. Above the Cherokee shale is the Clear Creek formation which includes all the workable coal beds not found in the Cherokee shales. The Pleasanton shales, the Kansas City group, the Rockport shales, complete the coal measure formations and this general group.

The Tertiary rocks were deposited long after the Rockport shales. These are found in the southeast, and include the Idalia shales, the Benton sands with its notable watermelon belt, and the Piketon gravels. This represents the last phase of the Tertiary submergence of southeastern Missouri. The submergence at no time extended far north of Cape Girardeau.

Following close upon the Tertiary submergence is the coming of the glacial deposits, three in number. Along the Missouri river, which was approximately the southern border of the ice, and in a narrow belt down the Mississippi river



ENTRANCE TO  
MARK TWAIN'S  
CAVE NEAR  
HANNIBAL.

Formation of the  
coal-bearing  
rocks.

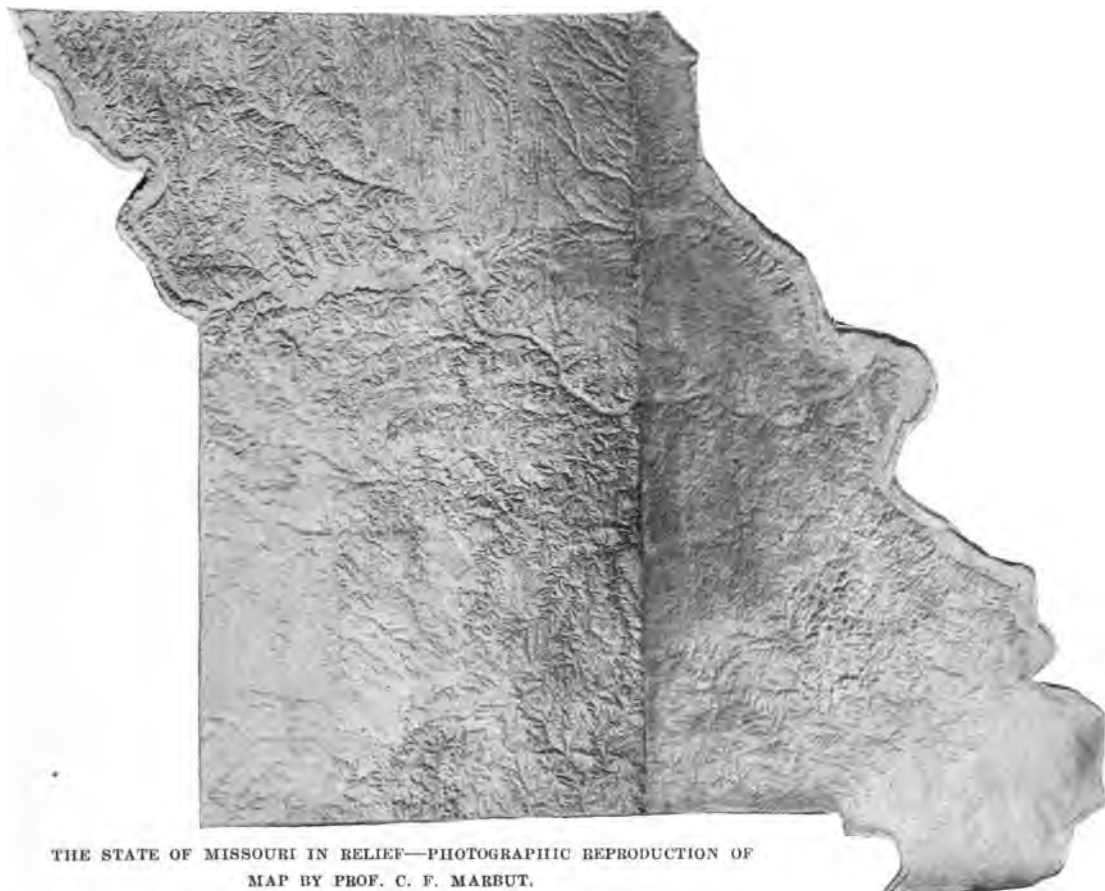
The Tertiary roc



is a deposit of a porous, brownish, coarse clay loam, and narrowest along the high bluff portion of the Missouri river between Jefferson City and Washington. It forms the basis of the most fertile large body of soil in the State of Missouri. Just north of the belt of loess is a belt or area of fine-grained bluish clay, with occasional beds and pockets of sand, especially in the lower part. It may be considered to extend over all the northern part of the State except the area of the loess and a small area of gravelly clay in Harrison, Gentry and Worth counties. The third phase of the glacial deposits is of the same character as the second, with a considerable proportion of gravel bowlders and sand. The three kinds of deposits grade insensibly into each other so there is no sharp line of demarcation between them.

Glacial deposits.

Since the disappearance of the glacial sheet the area of the State of Missouri has been continuously a land surface and its physical history has been and still is continuous and one of erosion. The beds of rock that have been deposited during the long ages in the past are now being worn away by the forces which attack all land surfaces. The duration of this continental period may be looked upon, however, in the light of the history of the past. At several times during the long geological history of the State it has been part of the land area and was later submerged again. The present continental period is probably not exceptional. At some time in the far distant future it may again go beneath the sea and receive another coating of material. The world is not yet finished. World-making forces are at work now as vigorously, probably, as at any time in the past. We live in the midst of these changes but on account of the extreme shortness of our time-measuring units the long periods of geological time have no end and the changes going on around us marking the progress of that time are unnoticed.



THE STATE OF MISSOURI IN RELIEF—PHOTOGRAPHIC REPRODUCTION OF  
MAP BY PROF. C. F. MARBUT.

# AGRICULTURE



**M**ISSOURI produced last year one-eighth of all the corn of the United States and more than one-tenth of all the corn of the world.

One county in Missouri grows more corn than is produced by all the new England States combined.

One man in Missouri grew on his farm this year more corn than is reported by the last census from the nine States of Utah, Oregon, Washington, Arizona, Idaho, Montana, Rhode Island, Wyoming and Nevada combined.

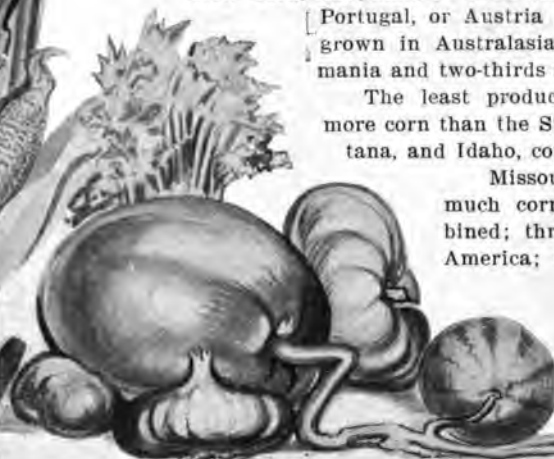
Three counties in Missouri grow more corn than these nineteen States combined: Maine, Massachusetts, New Hampshire, Vermont, Rhode Island, Connecticut, Colorado, North Dakota, Florida, California, New Mexico, Oregon, Washington, Utah, Arizona, Idaho, Montana, Wyoming, and Nevada.

This is more corn than is reported by the census for either New York, Maryland, or West Virginia; more than either Spain, Portugal, or Austria grows; is twice as much as is grown in Australasia, including Australia and Tasmania and two-thirds as much as is grown in Egypt.

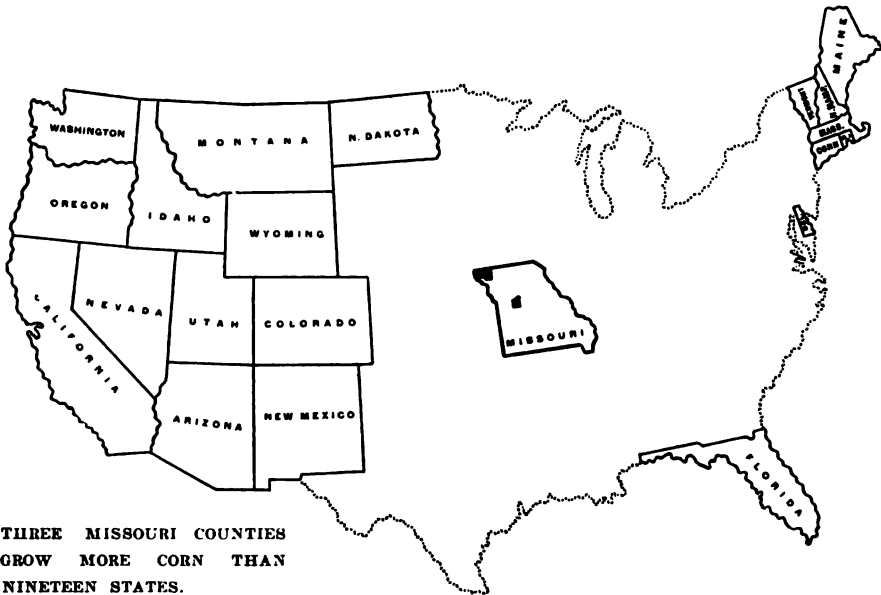
The least productive county in Missouri grows more corn than the States of Nevada, Wyoming, Montana, and Idaho, combined.

Missouri grows nearly three times as much corn as Canada and Mexico combined; three times as much as all South America; three-fifths as much as all Europe, and nearly one-half as much as is produced in the whole world outside of the United States.

Missouri's corn crop last year is esti-



\*At the time this article was prepared the Government and State statistics for 1903 were not complete. Therefore the statistics are for 1902 except those taken from the Twelfth Census which are for 1900.



THREE MISSOURI COUNTIES  
GROW MORE CORN THAN  
NINETEEN STATES.

mated by the State Board of Agriculture at 314,073,985 bushels, worth, on the farm, \$100,000,000. This was the largest yield of any State in the Union, with possibly one exception, and was the highest average yield per acre of any State in the Union.

Missouri grows  
one-tenth of all  
the corn of the  
world.

Missouri's corn crop exceeded the combined production of thirty States and Territories, as follows: Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New York, Pennsylvania, New Jersey, Delaware, Maryland, Virginia, North Carolina, South Carolina, Georgia, Florida, Alabama, Mississippi, Louisiana, North Dakota, Montana, Wyoming, Colorado, New Mexico, Arizona, Utah, Washington, Oregon, California.

Missouri produced last year, according to the State Board of Agriculture, 62,000,000 bushels of wheat, which was one-twelfth of the entire wheat crop of the United States; the largest yield accredited to any winter wheat State, and the largest average yield per acre of any State, either winter or spring.

The Missouri wheat crop exceeded the combined production of twenty-two States, including New York, Pennsylvania, Maryland, Virginia, and all the New England States.

This is more wheat than is grown by the United Kingdom of Great Britain, including England, Scotland, Ireland, and Wales; more than is produced by either Ontario or Manitoba, and two-thirds as much as the whole of Canada.

This exceeds the combined wheat crop of Norway, Sweden, Denmark, Netherlands, Belgium, Portugal, and Switzerland, and it is four-fifths as much as is grown in the whole of South America.

This is more than is grown in Austria or Roumania; more than Bulgaria and Servia combined; exceeds the total production of Australasia, including



Highest average  
yield of corn per  
acre of any State  
in the Union.

Australia, Queensland, New South Wales, Victoria, Tasmania, and New Zealand.

This exceeds the combined wheat crops of Siberia and Central Asia; is more than is produced in Africa, including Egypt, Algeria, Tunis, and Cape Colony, and is more than three times the wheat production of Japan.

Missouri's aggregate annual production of the six chief cereals (corn, wheat, oats, barley, rye, and buckwheat) exceeds the combined production of the following twenty-four States: Kentucky, Massachusetts, New Hampshire, Rhode Island, Maine, Vermont, Delaware, New Jersey, Georgia, Alabama, Maryland, Louisiana, West Virginia, South Carolina, Florida, Colorado, Washington, Oregon, Idaho, Utah, New Mexico, Arizona, Wyoming, and Nevada.

The average production per State of corn last year for the eleven States: Illinois, Iowa, Ohio, Indiana, Kansas, Nebraska, Michigan, Minnesota, Wisconsin, New York, and Pennsylvania, was 147,220,343 bushels.

Missouri's corn crop was 314,073,985 bushels, or more than double the State average of these leading States.

The State average production of wheat for these States was 32,603,042 bushels. Missouri's wheat crop was 62,000,000 bushels, or almost double the average production of these leading States.

In oat production the State average of the eleven States listed above was 20,546,281 bushels, while Missouri's crop was 23,967,170 bushels.

The average production of hay in these States is 3,495,272 tons, and Missouri's hay crop was 4,828,005 tons, or one-third more than the State average of these eleven leading hay States.

In the production of the six leading cereals (corn, wheat, oats, barley, rye, and buckwheat), the average of the eleven States was 399,086,155 bushels, or nearly fifty per cent more than the State average of these eleven leading States.

The center of Total Acreage in Farms in the United States is in Missouri.

The center of Improved Farm Acreage is at the eastern border of the State.

The center of Farm Values of the United States was at the edge of Missouri in 1899, and may be safely said to lie within the State at this time.

The center of Corn Production of the United States is at the eastern edge of Missouri.

The center of production of the six leading cereals, corn, wheat, oats, barley, rye, and buckwheat, is in Missouri.

Missouri grows one-twelfth of all the wheat of the United States.



THE MORNING START.

Wheat crop exceeds combined production of 22 States.



HAYMAKING, DAVIESS COUNTY.

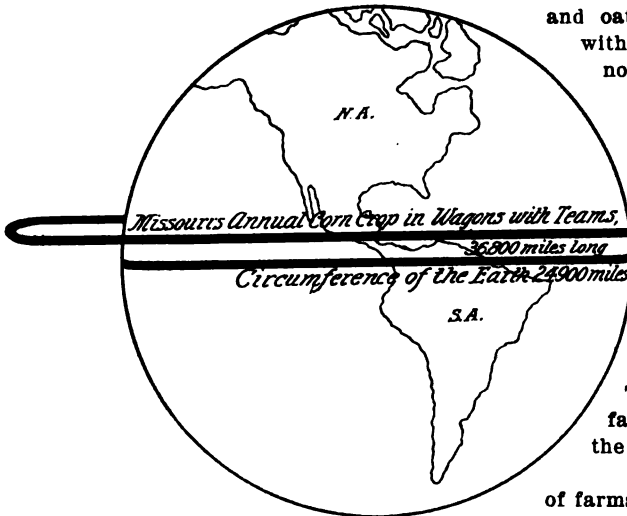
Largest yield per acre accredited to any State in the Union.

## THE STATE OF MISSOURI.

The center of Gross Income from Farms of the United States is at the eastern border of the State.

The centers of production of wheat and oats of the United States are within a hundred miles of the northern boundary of the State.

The centers of population, manufacturing, education, progress, culture, follow the center of production.



Missouri had in 1900 284,886

farms, aggregating 34,000,000 acres, or an average per farm of 120 acres. These farms were worth, according to the census, \$843,979,213. This is the largest number of farms reported for any State in the Union excepting Texas.

The increase in the number of farms in Missouri during the last ten years was 19.7 per cent, a larger increase than is reported for Illinois, Iowa, Kansas, or Nebraska.

The increase in the number of persons engaged in agriculture in Missouri during the last ten years is 18.4 per cent; a larger increase than occurred in either Illinois, Iowa, Kansas, or Nebraska during the same period.

Sixty-nine per cent of these farms were operated by their owners, a larger proportion than is shown by Illinois, Iowa, Kansas, or Nebraska.

More people are engaged in agricultural pursuits in Missouri than in Illinois, Iowa, Kansas, Nebraska, New York, Pennsylvania, or Ohio.

Missouri's annual production of sweet potatoes is 743,377 bushels. This is more than is grown by Illinois and Iowa, combined; more than the production of Arkansas, Nebraska and Oklahoma, combined; more than the whole of New England; more than the total of thirty other States.

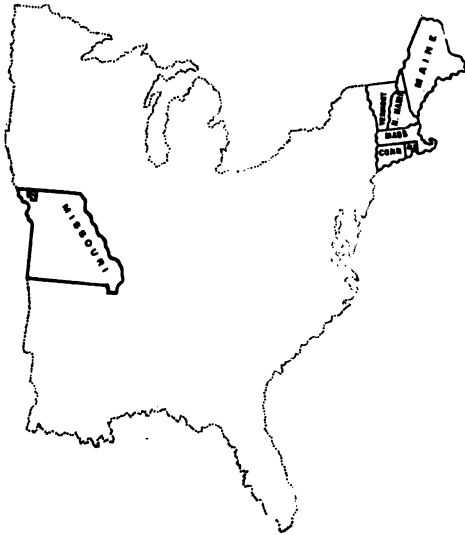
Missouri's corn crop loaded into wagons holding fifty bushels each, and allowing twenty-five feet for each wagon and team, would make a procession 36,800 miles long, or long enough to extend once and a half around the world.

Corn is Missouri's one hundred million dollar crop. Practically one-half of the annual harvest of the State is corn. Wheat amounts to one-fifth and all other crops to three-tenths. In Missouri Corn is indeed King.

Missouri's production of six chief cereals exceeds that of 24 States.

Missouri has largest number of farms of any State excepting Ohio.

Exceeds all its neighbors in proportion of farms operated by owners.





CUTTING OATS, ATCHISON COUNTY.

One man, gathering fifty bushels of corn per day, would be kept busy in harvesting the crop, six million, two hundred and eighty-one thousand days, or over twenty thousand years.

The Missouri oat crop last year was 27,816,165 bushels, or more than the combined crop of Australasia and Africa, or as much as is produced by Spain and Italy together.

Missouri's potato crop last year was 12,234,112 bushels, or approximately as much as was produced by Massachusetts, Colorado, Texas, Georgia, Florida, Alabama, Mississippi, Louisiana, Wyoming, New Mexico, and Nevada, combined.

The products sold from the market gardens of Missouri in 1900, according to the census, brought \$3,494,357, a gain during the last ten years of 215 per cent. This is approximately as much as the vegetable output of all the New England States excepting Massachusetts, and about the same as the sales from Kansas, Nebraska, the two Dakotas, and Wisconsin, combined.

Missouri has, according to the last census, the largest number of family gardens of any State in the Union, and devoted to these crops 74,633 acres, producing a crop worth \$5,388,000. This exceeds the combined production of Illinois and New Jersey, and is more than is produced by Massachusetts, Connecticut, Maine, New Hampshire, Rhode Island, Vermont, New Jersey, and California, combined.

Of the twenty-five counties in the United States reported in the census as leading in vegetables and producing about one-tenth of all the vegetables grown in the United States, St. Louis and Dunklin counties are included.

Missouri had, in 1900, 3,126,400 square feet of glass devoted to vegetable production, a larger area than was reported for the States of Iowa, Kansas and Nebraska, combined.

The leading watermelon county in the United States, is according to the last United States census, Scott county, Missouri.

The second county in the United States in the production of watermelons is, according to the same authority, Dunklin county, Missouri.

These two counties produce more than one-fourth as many watermelons as the State of Georgia, and more than either Illinois, Iowa, Kansas, Indiana, Florida or Arkansas, and as many as were produced by New Jersey and California, combined.

One county in Missouri grows more sweet potatoes than either Iowa, Penn-

It would take one man 20,000 years to gather Missouri's corn crop.

Missouri's corn crop would reach once and a half around the world.

Grows more sweet potatoes than total of 30 States.

*Average Production of Six Leading Cereals, in Eleven Leading States.*

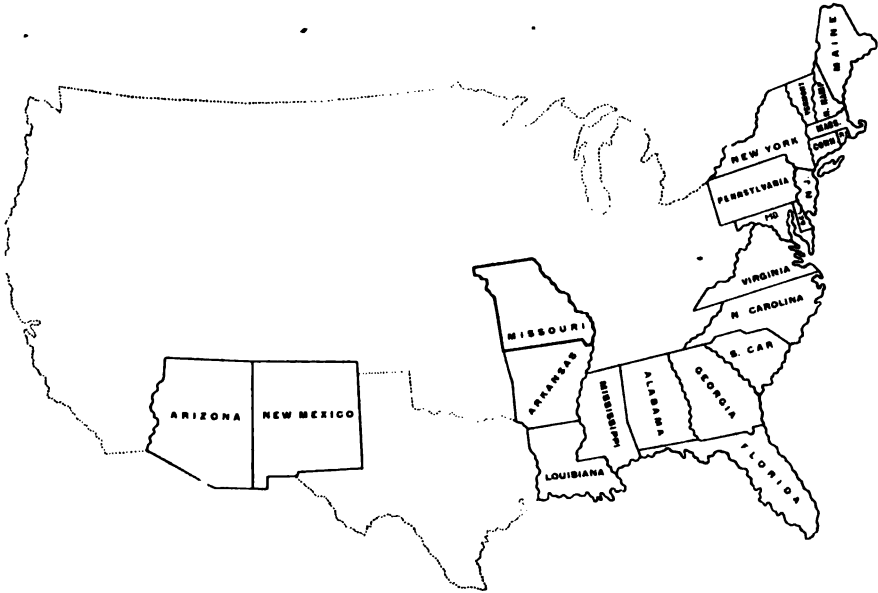
**273.002.718 Bushels.**

*Production of Six Leading Cereals in Missouri*

**399.086.155 Bushels.**

Largest number of family gardens of any State.

Leading water-melon county of United States.



MISSOURI GROWS MORE OF THE SIX CHIEF CEREALS THAN TWENTY-FOUR STATES.

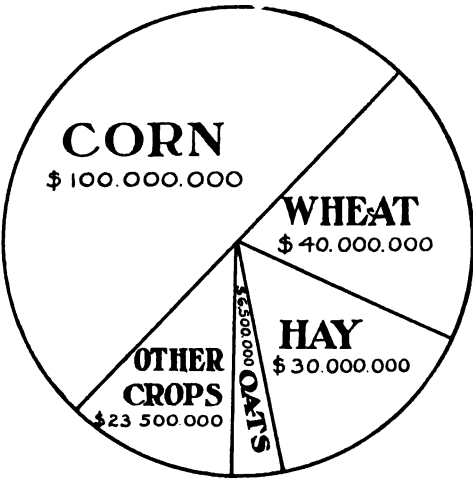
sylvania, West Virginia, Delaware, or Oklahoma, and more than the combined production of Nebraska, New York, and all the New England States.

Missouri produces the largest yield of cotton per acre of any State in the Union.

Two Missouri counties ship a watermelon for the head of every family in the United States.

Missouri produces as much clover hay, according to the last census, as all the New England States, Iowa, New York and Minnesota, combined.

The State contains 69,415 square miles of land surface, or 45,425,600 acres, of which 33,997,873 acres are included in farms. Of this area 22,900,043 acres are improved. There were, in 1900, 284,886 farms of an average size of 119.3 acres, which were valued, exclusive of buildings, by the United States census, at \$695,470,723. The buildings were valued at \$148,508,490, making a total value for farm lands and buildings of \$843,979,213.



MISSOURI'S ANNUAL HARVEST.			
CROP	ACRES	PRODUCT	VALUE
Corn	7,746,214	314,093,985 bu.	\$99,727,295
Wheat	3,166,900	61,045,000 bu.	34,490,000
Oats	759,434	23,867,169 bu.	6,374,795
Hay	2,940,600	4,828,005 tons	29,428,870
Forage	370,725	462,070 tons	2,310,350
Flax	85,402	366,849 bu.	380,940
Rye	25,550	459,900 bu.	229,950
Buckwheat	2,500	40,000 bu.	24,000
Barley	1,820	45,500 bu.	15,835
Broom Corn	8,765	4,661,600 lbs.	129,532
Clover Seed		58,737 bu.	394,698
Grass Seed		219,760 bu.	454,425
Cotton	67,658	23,916,840 lbs.	1,788,960
Tobacco	4,361	3,356,460 lbs.	324,040
Potatoes	93,915	11,510,451 bu.	3,870,435
Vegetables	114,853		5,153,958
Pastures	7,511,346		15,022,692
Total	20,900,043		\$200,110,775



A MISSOURI FARM HOME, MACON COUNTY.

The figures of Missouri's annual harvest place the State in the very front rank of agricultural States. At the same time no other State is developing as rapidly and adding to her agricultural wealth at the same rate.

Largest yield of cotton per acre of any State.

It is obvious that the future is secure of any State that grows successfully and profitably in every county, every year, corn, wheat, oats, timothy, clover and blue grass. In addition to these staple crops Missouri grows commercially a larger variety of valuable crops than any other similar area in America, or the world. No state is less afflicted with drouths, floods, insect pests, blighting winds or crop failures.

The Missouri farmer has more time in which to plant, cultivate, harvest and market his crops than has his northern neighbor. The mild climate affords more working days in the year and a longer growing season so that the efficiency of the workman is increased. The plow may be kept going in almost every month of the year. The soil is thus prepared without haste and at a minimum expense.

Missouri grows every valuable grass known to man.

In the East high-priced land and costly fertilizers reduce the margin of profit. In the West expensive irrigating plants and high-priced water affect seriously the cost of production. Missouri's soils are productive without artificial fertilization and her rainfall is sufficient to insure large crops without irrigation.

Missouri's soils have stood the test of more than a half century and will not wear out, burn out or leach out.

When the population becomes so dense as to demand the highest possible production, Missouri's farms may be brought under artificial irrigation at far less expense and with greater assurances of an abundant and regular supply of water and with a far greater variety of valuable crops to grow than any country now under irrigation.

Soils permanently productive without fertilization.

*Average Production of Wheat in Eleven Leading States*

**32,603,042 Bushels.**

*Production of Wheat in Missouri*

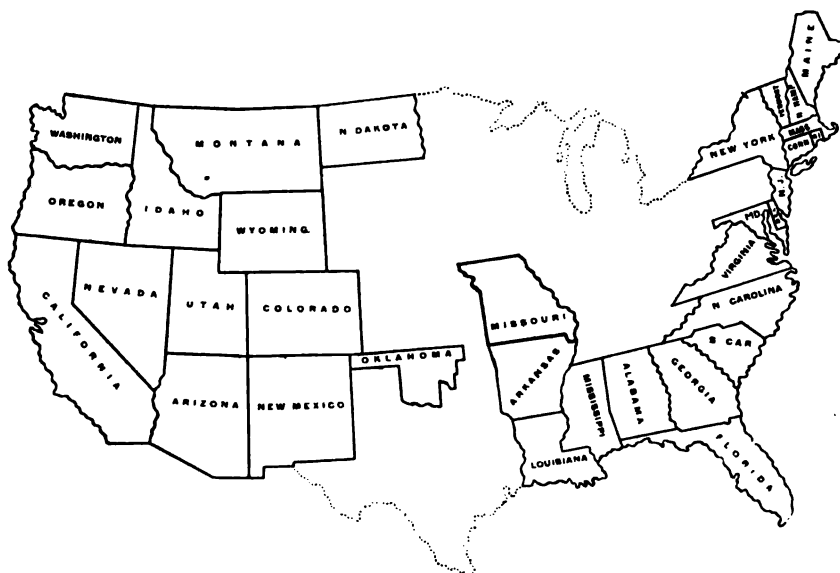
**61,045,000 Bushels.**



Ten principal  
classes of soils.

The soils of Missouri may be divided into ten principal classes as shown by the accompanying map and represent: 1. Alluvium; 2. loess; 3. limestone clay loam (black prairie); 4. clay loam, slightly gravelly (rolling prairie); 5. clay loam (level prairie); 6. limestone shale loam; 7. sandy loam; 8. red limestone clay (slightly flinty); 9. limestone clay (flinty); 10. red limestone clay.

Alluvium soil 200  
feet deep.



MISSOURI'S CORN CROP EXCEEDS THE COMBINED PRODUCTION OF THIRTY STATES.

Alfalfa more pro-  
ductive and more  
easily grown than  
anywhere else.

Alluvium occurs along all rivers and creeks in the State, and varies in depth from 6 to 200 feet. The large bodies shown on the accompanying soil map are along the Mississippi and Missouri rivers and in the southeastern corner of the State. The large body of alluvial soil in southeastern Missouri covers the counties of Mississippi, New Madrid, Scott, Stoddard, Pemiscot and Dunklin, the eastern half of Butler, the southeastern corner of Ripley and a narrow strip on the south side of Wayne and Cape Girardeau. This represents two separate belts divided by a band of loess known locally as Crowley's Ridge. The western belt is alluvium mixed with clay overlying a white sand at a depth of from 6 to 18 feet. The eastern half is a mixture of silt and fine sand forming a typical alluvium deposit. Large areas of this very productive soil have not yet been brought into cultivation and are covered with a dense growth of valuable cypress, tupelo and sweet gum, cottonwood, elm, ash, and oak.

Large bodies of  
loess, a soil  
which supports  
the world's dens-  
est populations.

Until recently much of this land has been too subject to overflow to be brought into cultivation. It has been abundantly demonstrated, however, that all of this land may be rendered arable and productive at a relatively slight expense by means of large open ditches. There are already in New Madrid county alone 233 miles of these ditches made at cost of from \$2 to \$3 per acre. In other counties of this district, ditches are being constructed so as to reclaim in a short time the whole of this valuable area. Underlying all of this land at a depth of from 10 feet to 12 feet is a porous stratum of sand through which the water readily flows so that the ditches will drain the land effectively for a distance of one-half mile. This means that a ditch along each section line will remove every obstacle in the way of cultivating this land, which is so well adapted to the production of all classes of farm crops, particularly corn, wheat, cotton, cowpeas, clover, alfalfa, timothy, bermuda grass, watermelons, cantaloupes, potatoes and tomatoes. Alfalfa is perhaps more productive and more easily grown in southeast Missouri than anywhere else in the country. Land that

in a few years will be worth from \$50 to \$75 per acre may be purchased at from \$10 to \$15 per acre.

Smaller areas of very productive alluvium are found along the Osage, Grand, Chariton, Platte, Salt, Crooked Loutre, One Hundred and Two, Fabius, Merimac, White, James, Bourbase, Black, St. Francois, Current and Elevenpoint rivers. In many localities this class of soil is selling at from \$50 to \$60 per acre while similar land in other States sells for from \$100 to \$150 per acre.

The value of loess is well known all over the world. Wherever it occurs a highly developed agriculture is found. The densest agricultural population in the world is supported by the loess soils of Asia. It is friable and easily worked,

of texture coarse enough to drain well and yet fine enough to withstand drouths and yields its moisture readily and fully to growing crops. It varies in depth in this State from 20 feet to 200 feet, and will produce large crops without artificial fertilization for an indefinite period of time. This soil occurs chiefly along the Missouri river forming a belt beginning at the mouth of the Osage river and widening westward to a maximum of 60 miles in Saline and Carroll counties. Here it begins narrowing and is reduced to a width of about 12 miles at Kansas City, then extends to the north line of the State with a width of about forty miles. Smaller areas occur along the Mississippi river in the counties of St. Louis, Ste. Genevieve, Perry, and Cape Girardeau, and a narrow belt in south-east Missouri extends across New Madrid, Scott and Dunklin counties. The timber growth is elm, linden, black walnut, hackberry, red oak, burr oak and pawpaw. All crops of this latitude such as corn, wheat, oats, alfalfa, timothy, blue grass, red and white clover and all

Black prairie soil of unlimited fertility.

Rolling prairie that will not wear out

Limestone shale loam—rich friable soil.



A MISSOURI FARM HOME,  
LAFAYETTE COUNTY.

classes of fruits and vegetables reach the highest development and produce maximum yields on this soil. The surface is rolling, but level enough to be practically all cultivated. On this soil corn is planted with the lister, thus dispensing with the cost of plowing the land before planting. Alfalfa thrives as well as in any portion of the United States.

Limestone clay loam (black prairie) is an admixture of clay, silt, sand and limestone clay, resulting from a mixture of glacial soil with the decomposition product of the limestone bed rock. It is black in color, owing to the large amount of vegetable matter it contains, and varies in depth from four feet to twelve feet. The surface is undulating and is for the most part prairie, forming the high plain of northwest Missouri, and embracing the northern parts of Ray and Clay counties, the whole of Caldwell and Clinton, eastern Nodaway, northern Car-

COTTON AND CORN,  
DUNKLIN  
COUNTY.





CULTIVATORS AT WORK ON A NORTHWEST MISSOURI FARM.

Sandy loam—deep,  
and productive.

roll and southwestern Livingston. The timber growth, in fringes along the water courses, is elm, black walnut, cottonwood and mulberry. This land produces all crops adapted to this climate, but it is especially suited to corn and grass, has great drouth-resisting powers and will be highly productive without artificial fertilization for an indefinite period of time.

The clay loam slightly gravelly (rolling prairie) is a triangular area with a maximum width at the northern line of the State, where it extends from the Chariton river on the east to the western line of Worth county on the west—a distance of nearly 100 miles. In the valleys the soil is similar to that of the black prairie region. The upland is a black soil varying from two feet to five feet in depth, and is composed of clay with sufficient sand to make it friable, easily cultivated, warm and quick. It contains somewhat more water courses than the black prairie region and the surface is somewhat more rolling. Along these water courses are splendid bodies of alluvium. All crops thrive well on this soil, but it is especially adapted to corn, wheat, blue grass and clover. The land stands heavy cropping for a long time and recuperates with great rapidity when allowed to rest, or when changed to grass or clover. The timber growth is hazel, sumach, elm and white oak. The section embraces the counties of Putnam, Sullivan, Linn and Mercer, eastern Grundy, northern Harrison, northeastern Gentry, Worth and Chariton; western Randolph, Macon, Adair and Schuyler.

Red limestone  
clay, on which  
is grown the  
world's prize  
wheat.

The clay loam comprises the portion of northeast Missouri drained into the Mississippi river by the smaller streams and rivers, and embraces the following counties: Scotland, Clark, Lewis, Knox, Marion, Shelby, Rails, Monroe and Audrain; the southern portions of Boone, Callaway, Montgomery and Warren; the eastern portions of Randolph, Macon, Adair, and Schuyler;



ON A LIVINGSTON COUNTY FARM.

western Lincoln and Pike. The upland is a gently undulating prairie with a clay limestone soil, varying in depth from one foot to five feet and is dark in color. It is productive, drouth-resistant and comparatively easy to cultivate. This soil is well adapted to corn,

Flinty limestone  
clay, the grazing  
and orchard  
lands.

oats, timothy, blue grass, clover, broom corn and wheat. Like the other classes of Missouri soil, experience has demonstrated that it remains productive for a long period of time even under excessive grain cropping and recuperates quickly when grown in grass or clover. The surface is such as to enable this land to be cultivated conveniently and cheaply in large bodies. Large areas of very rich bottom land are found along all the rivers and creeks.

The limestone shale loam is a rich friable soil, dark in color with an undulating surface, was originally prairie and covers the following counties: All





CULTIVATORS AT WORK ON A NORTHWEST MISSOURI FARM.

Sandy loam—deep,  
and productive.

roll and southwestern Livingston. The timber growth, in fringes along the water courses, is elm, black walnut, cottonwood and mulberry. This land produces all crops adapted to this climate, but it is especially suited to corn and grass, has great drouth-resisting powers and will be highly productive without artificial fertilization for an indefinite period of time.

The clay loam slightly gravelly (rolling prairie) is a triangular area with a maximum width at the northern line of the State, where it extends from the Chariton river on the east to the western line of Worth county on the west—a distance of nearly 100 miles. In the valleys the soil is similar to that of the black prairie region. The upland is a black soil varying from two feet to five feet in depth, and is composed of clay with sufficient sand to make it friable, easily cultivated, warm and quick. It contains somewhat more water courses than the black prairie region and the surface is somewhat more rolling. Along these water courses are splendid bodies of alluvium. All crops thrive well on this soil, but it is especially adapted to corn, wheat, blue grass and clover. The land stands heavy cropping for a long time and recuperates with great rapidity when allowed to rest, or when changed to grass or clover. The timber growth is hazel, sumach, elm and white oak. The section embraces the counties of Putnam, Sullivan, Linn and Mercer, eastern Grundy, northern Harrison, northeastern Gentry, Worth and Chariton; western Randolph, Macon, Adair and Schuyler.

Red limestone  
clay, on which  
is grown the  
world's prize  
wheat.

The clay loam comprises the portion of northeast Missouri drained into the Mississippi river by the smaller streams and rivers, and embraces the following counties: Scotland, Clark, Lewis, Knox, Marion, Shelby, Ralls, Monroe and Audrain; the southern portions of Boone, Callaway, Montgomery and Warren; the eastern portions of Randolph, Macon, Adair, and Schuyler;



ON A LIVINGSTON COUNTY FARM.

western Lincoln and Pike. The upland is a gently undulating prairie with a clay limestone soil, varying in depth from one foot to five feet and is dark in color. It is productive, drouth-resistant and comparatively easy to cultivate. This soil is well adapted to corn,

Flinty limestone  
clay, the grazing  
and orchard  
lands.

oats, timothy, blue grass, clover, broom corn and wheat. Like the other classes of Missouri soil, experience has demonstrated that it remains productive for a long period of time even under excessive grain cropping and recuperates quickly when grown in grass or clover. The surface is such as to enable this land to be cultivated conveniently and cheaply in large bodies. Large areas of very rich bottom land are found along all the rivers and creeks.

The limestone shale loam is a rich friable soil, dark in color with an undulating surface, was originally prairie and covers the following counties: All



\_\_\_\_\_

\_\_\_\_\_



FARM SCENE, ATCHISON COUNTY.

of Cass, the south half of Jackson, southwestern quarter of Lafayette, southwestern two-thirds of Johnson, the southwestern portion of Henry and northern Bates. It is well adapted to corn, all varieties of grass, wheat, clover, flax and castor beans, and can be made to grow alfalfa successfully.

Sandy loam is a clay ameliorated by a mixture of sand, dark in color, deep and productive. It covers the counties of Barton, Vernon, southern Bates, eastern Henry and Johnson; the western portion of Pettis, St. Clair and Cedar; northwestern Dade and northern Jasper. It is well adapted to corn, wheat, timothy, flax, broom corn, orchard grass, blue grass and alfalfa.

400,000 acres of  
unentered gov-  
ernment land.

Red limestone clay is the border of the Ozark region and covers the counties of Cole, Moniteau, Lawrence, Polk, Newton and Greene, nearly all of Dade; the eastern portions of Cape Girardeau, Perry, Ste. Genevieve, Jefferson, St. Clair, Pettis, Miller and Cedar; the western part of St. Louis, Franklin, Gasconade, Osage, Hickory and Dallas; northern Crawford, McDonald, Christian and Stone; southern Cooper, Laclede, and Morgan; northwestern Barry and Douglas; southwestern Webster; southeastern Maries; northeastern Phelps and a small portion of Wright, Ripley, and Butler. It is a limestone clay soil with a slight admixture of flint, red in color and varies in depth from one foot to four feet. In the river and creek valleys occur large bodies of alluvium. The surface is rolling, but is for the most part level enough to be divided into large, regularly shaped fields on which the most improved machinery is operated. This section is especially adapted to wheat, producing a plump berry of fine color and very high milling quality. In addition to wheat it is adapted to the production of corn, clover, blue grass, orchard grass, tall fescue, English blue grass, timothy, all classes of fruits and vegetables, cotton in the southmost parts and on a considerable portion of this soil alfalfa will succeed.

Limestone clay (flinty) is the Ozark plateau. It is a clay limestone soil with an admixture of flint, is red or gray in color and varies in depth from one to three feet. The area comprises the counties of Texas, Shannon, Dent, Reynolds, Howell, Oregon, Carter, Ozark, Taney, Wayne, Iron and Washington; nearly all of Camden and Pulaski; the southern part of Stone, Phelps and Crawford; southeastern Barry and Benton; southern McDonald and Morgan; southwestern Jefferson and St. Francois; northeastern Webster; eastern Dallas; western Ste. Genevieve, Perry and Cape Girardeau; northern Ripley and Butler. The surface is hilly with narrow valleys. A relatively small proportion of the upland is well developed, excepting in the southern and western parts. The valleys of the streams contain a rich alluvial soil, already in a high state

Corn the world's  
greatest cereal.



of cultivation. This is the timber reserve of the State and comprises the whole area of Missouri that is capable of growing pine. The undeveloped parts, wherever the timber is thin enough, are covered with blue stem grass and Japan clover, furnishing excellent grazing for all classes of live stock. When cleared, nearly all of this land will grow red and white clover, cowpeas, orchard grass, tall meadow oat grass, tall fescue, red top, and timothy. On much of this land it will be possible to grow alfalfa successfully. With the rich valleys for the production of corn and considering the mild climate and the very few months in which it is necessary to feed stock, the whole of

Three Missouri boys  
earned \$4154.52  
in one summer  
in the corn field.

THREE MISSOURI LADS AND THEIR  
CHECK FOR A SUMMER'S CORN  
CROP GROWN ON  
SHARES.

JAMES  
CHRISTIAN.



GEORGE  
CHRISTIAN



HARRY  
CHRISTIAN

The largest corn  
farm in the  
world is in  
Missouri.

the section will in the near future be converted into pastures, or live stock farms. Much of this land may now be purchased at from \$1.25 to \$2.50 per acre.

Red limestone clay, flint free: A comparatively small body of exceedingly productive soil described as a red limestone clay, free from gravel, occurs in Iron, Madison, St. Francois, and Washington counties. This soil is deep red in color, varies in depth from one and one-half to three feet and is adapted to all crops grown in the State. It is especially suited to



MISSISSIPPI COUNTY CORN FIELD.



THIRTY-FIVE TWO-ROW CULTIVATORS AT WORK.

the production of wheat, clover, corn, fruits and vegetables of all classes and all kinds of grasses and forage plants. The surface is rolling, affording excellent natural drainage but level enough to be cultivated cheaply.

UNITED STATES LANDS.

There remain in Missouri subject to homestead or cash entry about 422,000 acres of Federal Government land, thus located:

A Missouri farmer is the real corn king.

SPRINGFIELD DISTRICT.		BOONVILLE DISTRICT.		IRONTON DISTRICT.	
COUNTIES	ACRES	COUNTIES	ACRES	COUNTIES	ACRES
Barry	9,484	Benton	1,500	Bollinger	1,521
Christian	256	Camden	18,316	Butler	801
Dallas	2,827	Cedar	40	Carter	480
Douglas	6,745	Crawford	360	Crawford	2,533
Laclede	4,744	Dallas	11,800	Dent	4,209
McDonald	7,970	Hickory	3,760	Howell	3,545
Ozark	51,941	Laclede	8,600	Iron	8,242
Pulaski	1,876	Maries	2,120	Madison	6,187
Stone	13,044	Miller	3,420	Oregon	5,249
Taney	12,787	Phelps	1,480	Perry	461
Texas	2,074	Polk	40	Phelps	12,052
Webster	268	Pulaski	13,470	Pulaski	4,538
Wright	2,540	St. Clair	2,000	Reynolds	6,522
		Washington	360	Ripley	3,268
Total	116,556	Total	67,266	St. Francois	200
				Ste. Genevieve	2,092
				Shannon	4,779
				Texas	12,789
				Washington	1,882
				Wayne	4,369
				Total	85,719

Free Government land.

*Average Production of Corn in Eleven Leading Corn States.*

**147,220,343 Bushels**

*Production of Corn in Missouri.*

**344,073,985 Bushels**

Wheat grown  
cheaper in Mis-  
souri than else-  
where.



BUILDING LEVEE, PEMISCOT COUNTY.

Homestead entries may be made for 160 acres and an additional 160 acres may be secured under cash entry. The homestead entry fees and commissions on lands not within two and one-half miles of a railroad are \$14 for 160 acres, \$13 for 120 acres, \$7 for 80 acres, and \$6 for 40 acres. On lands within two and one-half miles of a railroad the fees are \$18 for 160 acres, \$16 for 120 acres, \$9 for 80 acres, and \$7 for 40 acres. Under each entry the land costs \$2.50 per acre within railroad limits and \$1.25 per acre outside of the railroad limits.

United States land offices are located at Boonville, Ironton, and Springfield.

Corn is the world's greatest cereal. No other crop is to be compared with it in the quantity and quality of feed that may be grown per acre. In cheapness of production and convenience in handling it surpasses all other crops to even a greater extent. A State



Two valuable crops  
grown on the  
same land.

well adapted to corn will always have a prosperous and progressive agriculture. Such a State becomes a great feed yard and from it is drawn the world's supply of high class horses, mules, cattle, sheep, swine, poultry, butter, cheese, milk, etc. These are the highest types of farming and attract the most intelligent classes of people. Missouri grew last year 314,093,985 bushels of corn on 7,746,214 acres. This crop was worth on the farm approximately \$100,000,000. This was practically one-eighth of all the corn produced in the United States and more than one-tenth of the corn produced in the whole world.

The rivalry between the States of Missouri, Illinois, and Iowa for permanent supremacy in corn growing will ultimately result in Missouri's favor on account of the large area of new land that is being rapidly brought into cultivation.

In no other country can corn be grown more cheaply than on the undulating prairies and the level and extensive river bottoms of Missouri. In portions of the State one man with six horses does the work required in planting and cultivating 160 acres of corn. One man with a two-row lister will plow and plant 20 acres per day. By means of a double-row cultivator the same



SCOTT COUNTY WHEAT FIELD.

area may be tilled each day. This reduces the cost of growing corn to a point never before attempted, and marks a new epoch in the application of machinery to modern agricultural practice.

Another advantage in favor of Missouri is the fact that corn is ordinarily mature enough to store in large quantities by the middle of October in southern Missouri and by the first to the tenth of November in the northern part of the State. This gives the farmer the crisp, pleasant Indian Summer months in which to harvest and store his crop, and obviates the necessity of hiring help to garner what he has been able to grow.

As an illustration of the possibilities in this direction on the deep, rich, loamy soil of Missouri three boys, aged 9, 16 and 18 years respectively, prepared the ground, planted and cultivated 540 acres in corn in 1902, from which they sold 34,621 bushels of shelled corn. Under the contract with the owner of the land they were to receive 12 cents per bushel for their crop and the crop brought \$4,154.52. This return for one season's work was enough to give to each of these boys a University education. This crop at 35 cents per bushel would have brought \$12,057.35, or an average of \$4,019.11 for each boy.

The largest corn farm in the world is in Missouri. Here an estate covering over forty square miles and containing nearly 30,000 acres is owned and operated by David Rankin, of Atchison county, whose start in life was a yoke of oxen and a rudely-shaped plow. Missouri corn and cattle have made him a millionaire. On this farm this year more than a million and a half bushels of corn were grown. This equals the combined corn crop of the states of Utah, Oregon, Washington, Arizona, Idaho, Montana, Rhode Island, Wyoming and Nevada. This crop is annually augmented by the purchase of from one-half to three-fourths of a million bushels, all of which is fed to live stock on this farm. Twenty-five hundred bushels are required for seed to plant this great corn field. Here oftentimes more than \$100 worth of corn is fed to stock every hour. Four thousand bushels are fed daily to 6,000 cattle and 20,000 hogs. Often ten to fifteen thousand cattle are purchased at a time and made in a single shipment to this farm on which the freight alone amounts to as much as \$25,000. To plant and cultivate this crop requires an investment of nearly \$50,000 in machinery. In every operation each man cares for two rows at a time. The lister under the operation of one man plows and plants two rows and covers 20 acres per day. The cultivators till two rows at a time and average from 16 to 20 acres daily per man. On this farm 1,000 acres of land are often plowed and planted to corn in a single day. During the cultivating season from 1,000 to 1,200 acres are cultivated daily. Each man does the work connected with the planting and cultivating of from 160 to 180 acres, even including the shelling of the seed corn.

Here corn is grown cheaper than it can be harvested even with the most modern harvesting machinery. So called "Kings of the corn pit" are made and unmade in a single day, but a modest Missouri farmer is the real Corn King, whether the "Bulls or Bears" are in the ascendancy, producing more corn than any other farmer in the world and feeding the largest number of cattle and hogs of any individual.

Henry Senden, of St. Charles, grew last year 132 2-5 bushels of shelled corn

One man feeds  
\$100 worth of  
corn every ho

Corn grows tall  
trees in Shelby  
county.



FARM SCENE, MONROE COUNTY.

per acre on 12 acres of land. One third of this crop, the annual rental paid, amounted to \$18.24 per acre. This year the same land produced 90 bushels per acre, yielding a rental of \$12 per acre to the owner. Land similar to this and convenient to trunk lines of railways may be purchased at from \$40 to \$75 per acre in central and northern, and in southeastern Missouri at from \$10 to \$50 per acre.

R. B. Wright, of Mt. Leonard, Saline county, has made an average of 75 bushels of corn per acre for the last ten years on his entire crop, which ranged from 75 to 200 acres per year.

Largest acreages of  
blue grass of any  
State.

Frank Stafford, of Tarkio, Atchison county, reports an average of 118 bushels per acre on 50 acres and 142.5 bushels from one acre. This land has been in cultivation for 20 years and no artificial fertilization of any sort was used.

U. M. Randolph, of Eminence, Shannon county, reports a yield of 81 bushels per acre.

Missouri's wheat crop last year was 61,045,000 bushels, grown on 3,166,900 acres—an average of 19 9-10 bushels per acre. Every county in the State grows wheat of high quality and in sufficient quantities to require the use of the modern labor-saving machinery. Missouri's wheat crop last year exceeded the combined product of the following twenty-two States and Territories: Pennsylvania, New York, Massachusetts, Maine, Vermont, Connecticut, New Hampshire, Rhode Island, Virginia, Maryland, New Jersey, Delaware, North Carolina, South Carolina, Georgia, Florida, Louisiana, Alabama, Mississippi, New Mexico, Arizona and Nevada. The above States expend annually for commercial fertilizers with which to grow their crops, according to the United States census, the sum of \$44,555,000. In other words, it required practically all the wheat grown by farmers of these States to pay this fertilizer bill. Missouri's soil is rich enough to grow as much wheat, and practically as much corn, as all of these States without the use of artificial fertilizer. The land in Missouri is plowed for wheat during the leisure of mid-summer and early fall and the seeding is done before the rush of corn harvesting.

Blue grass grown  
successfully in  
every county.

By reason of the friableness of the soil, the work of preparing the land is reduced to minimum. Another special advantage not offered by the sections farther north is the very satisfactory result from sowing wheat after corn without plowing. This effects a saving of from \$2 to \$3 per acre, or from eight to twelve cents per bushel. The tillage given the corn provides an ideal seed-bed and the soil is rich enough to grow a maximum crop of wheat even immediately following so exhaustive a crop as corn.

Another advantage over the eastern method of handling wheat is the practice of threshing directly from the shock, thus saving the expense and waste of stacking the wheat. The threshed grain is left in the field in sacks until ready to be delivered to the elevator or railway station, thus avoiding the necessity of expensive granaries and double handling. In most sections wheat grows rank



HAY STACKING, AUDRAIN COUNTY.

Timothy, the leading hay grass, grown everywhere.

enough on the rich Missouri soil to furnish valuable pasturage during the fall, winter and early spring without affecting adversely the yield of grain. This pasturage is often worth enough to defray the cost of preparing the land and seeding.

A further advantage which none of the wheat growers north of Missouri enjoy is the opportunity of growing a valuable hay and renovating crop, such as cowpeas. After a crop of wheat has been harvested, the land is plowed and sown to cowpeas. This crop matures in time to permit the land to be again sown to wheat the same season, without plowing. In short, to grow two valuable crops on the land the same season—one of which restores, in a large measure, the fertility removed by the other.

More clover hay than all New England, Iowa, New York and Minnesota.

To illustrate the possibilities in this direction the Missouri Agricultural College, at Columbia, has grown wheat and cowpeas continually in the same field for the past four years, and reports the following yield of wheat:

In 1900, 26.9 bushels; 1901, 40.2 bushels; 1902, 45.3 bushels and 1903, 30.7 bushels. This makes a total yield per acre of wheat in four years, 143.1 bushels, or an average yield of 35.6 bushels per acre. After each crop of wheat a crop of cowpea hay, varying from one and a half to two and a half tons per acre was grown. No manure or fertilizer of any sort was used on this land. Here two valuable crops were grown each year with but one plowing and at practically the same cost as is ordinarily required for one crop excepting the actual expense of seeding and harvesting the additional crop.

In south Missouri this practice is very common and exceedingly profitable. One man grew this year 1,300 acres in cowpeas after wheat.

B. F. Marshall, of Blodgett, reports from eighty acres of wheat and cowpeas the following financial result: Twenty-four bushels of wheat per acre at 70 cents, \$1,344; 725 bushels of cowpeas at \$1.50, \$1,087; 102 tons cowpea hay at \$7, \$714; average per acre, \$39.20; total, \$3,136.

W. H. Hagerdorn, of Rhineland, Montgomery county, presents an authenticated report of a yield of 604 bushels of wheat from eight acres, or an average of 75.5 bushels per acre. This wheat, when standing, was so heavy that the binder could cut a swath of only two feet in width and the shocks stood so thick on the ground that a wagon could not be driven through the field without opening a road.

James L. Hammett, of Huntsville, Randolph county, reports an average yield of 49 bushels per acre on 30 acres.

Practically every valuable grass known to the world grows well in Missouri. The acreage of blue grass pastures in Missouri, on a conservative estimate, is placed at 7,511,346 acres; the largest of any State in the Union.

In the amount of hay pro-

Six crops of alfalfa per year from the same field.



OAT FIELD, LAFAYETTE COUNTY.



FARM SCENE, CALLAWAY COUNTY.

duced from domestic grasses Missouri is exceeded by only two States. During the last decade Missouri's production of hay increased 13.9 per cent, while there was a decline in the hay production of New York of 5.3 per cent, Illinois 19.6 per cent, Iowa 9.1 per cent, Pennsylvania 13 per cent and Ohio 8.8 per cent.

Alfalfa yields  
\$104 per acre.

The following grasses, clovers and forage plants are grown successfully in this State: Timothy, Kentucky blue grass, Canadian (Virginia) blue grass, blue stem, orchard grass, English blue grass, tall fescue, brome grass, tall oat grass, bermuda grass, red clover, white clover, alfalfa, alsike clover, Japan clover, cowpeas, soy beans, winter and spring vetches, sorghum, kafir corn, millet, hungarian, milo maize, teosinte, and rape.

Clover and cow-  
peas supplement  
corn and wheat.

Blue grass is the peer of all pasture grasses, and is the domestic grass of Missouri. It may be grown successfully in every county, but it reaches its highest development in the northern two-thirds of the State. The moment the land is cleared or grazed closely, the wild grasses yield to blue grass without artificial seeding, without cost, and without effort on the part of the farmer. It furnishes the most valuable and nutritious pasturage from the middle of April until the first of January, and may be depended upon to yield a valuable return every year without reseeding and without care or cost. It will support a steer to two acres and produce in the grazing season of six months three hundred pounds of gain in weight. When brought to its highest development a steer per acre is possible. In addition to the value of this crop as a feed, in many sections of the State the seed is harvested and yields from 10 to 40 bushels per acre, worth from 60 cents to 75 cents a bushel at home. The only cost involved is that of stripping and curing, for which a return of from \$6 to \$25 per acre in addition to the pasturage is secured.

Timothy is the leading hay grass of America and reaches its highest development in Missouri, and grows successfully in every portion of the State. A



HAYMAKING, CARROLL COUNTY.

crop, from one and a half to three tons of hay per acre is cut in July and the aftermath will almost sustain a steer per acre for three months as pasture. This crop is in many places harvested for seed, yielding from 6 to 10 bushels per acre, worth from \$1.50 to

\$2.50 per bushel. In addition to this the hay crop is almost as large as if the seed had not been harvested separately. Little or no difficulty is experienced in securing a stand which lasts almost indefinitely under ordinary care.



ALFALFA, PEMISCOT COUNTY.

White clover grows  
luminantly on all  
soils.

Red clover is, all things considered, one of the most valuable crops grown in the country and succeeds well in all parts of Missouri, and on all classes of soil. Missouri is excelled at the present time in clover production by only two States and at the present rate of increase will soon rank first. Missouri produced as much clover hay in 1900, according to the census, as all of the New England States, Iowa, New York and Minnesota, combined. A soil that grows clover profitably may be kept in a high state of productiveness indefinitely. A soil that will not grow clover or some similar renovating crop will require in a short time the purchase of costly commercial fertilizers. No one thing so clearly indicates the intelligence of the farmers or reflects so creditably upon their system of farming as the area devoted to this crop. The productive value of the corn as a feed is enhanced fully twenty per cent by combining with it clover, cowpeas, or alfalfa. The State, therefore, that is pre-eminently adapted to both corn and clover is particularly fortunate, indeed, in the distribution of its resources. The yield in this State varies from two to four tons of hay per acre, and in the ordinary season from three to six bushels of seed worth from \$12 to \$24 per acre is obtained as a second crop the same season at the cost of cutting and threshing. In portions of the State where clover has been grown the longest the soil has become so filled with seed that a good stand may be secured without the expense of seeding, in many cases.

Missouri the lead-  
ing clover State  
of the Union.

Second in importance, as a forage plant, only to clover, is alfalfa. It has already been proven that it succeeds on all the loess soils of the State, and practically all of the alluvial soils, and may be made to thrive, under proper care and management, on the rolling timbered area of the State. From four to six cuttings are made each year, aggregating from three to six tons of hay.

In 1901, J. P. Davis, Fortesque, Holt county, sold \$80 worth of hay and seed per acre from twelve acres of alfalfa. Charles L. Cunningham, of Caruthersville, who has more than three hundred acres in alfalfa, reports an average yield of six tons per acre in 1902, for which he received \$18 per ton on board cars at the local shipping station; an average of \$104 per acre. In 1903 S. P. Reynolds, of Caruthersville, paid \$100 per acre for a farm seeded to alfalfa and sold from it within six months after its purchase \$50 worth of hay per acre. G. H. Sly, of

Tobacco yield  
1500 pounds per  
acre.



One county's  
annual cotton  
crop worth 1 1/2  
million dollars.



A THOUSAND ACRES OF COWPEAS ON ONE FARM, SCOTT COUNTY.

Watermelons  
from two Mis-  
souri counties  
make a train 55  
miles long.

Ozark lands will  
grow alfalfa.

Rockport, reports a yield of five tons of alfalfa hay per acre on nineteen acres from four cuttings.

The rich alluvial soils of southeast Missouri grow alfalfa with greater certainty and with less risk and difficulty in securing the stand than perhaps any other section of the United States. The seeding there is usually done in March or April on growing wheat and after the wheat crop is removed a fair crop of hay is cut the same season. In this district are fields of alfalfa twelve years old that are producing as large yields as ever and show no signs of deterioration. Land that will produce five to six tons of this hay per acre without the usual risks and difficulties of securing a stand may be purchased at from \$20 to \$50 per acre. Owing to its geographical location this section is peculiarly adapted to profitable hay production inasmuch as it has both river and rail transportation and is at the very southern edge of extensive hay growing and has the benefit of the best hay market in the world, the cotton growing States of the South. Here the farmer secures St. Louis, Kansas City or Chicago prices, plus freight and commission, whereas the farmers of the northern and western states are obliged to accept these prices with the freight and commission deducted. This makes a difference of from \$2 to \$5 per ton, and when it is considered that a larger yield may be obtained on land that is less costly than that of the north and west, the advantages of this country for this purpose are apparent.

On the gravelly soils of the Ozark border particularly in Benton county, alfalfa has shown itself to be particularly well adapted. There is no reason why it may not be grown with equal success over the whole of this Ozark border, and perhaps on a majority of the Ozark plateau. In this event land that may be purchased now at from \$3 to \$7 an acre may be made as productive and valuable as land that in other States is selling at from \$50 to \$100. The possibilities of alfalfa-growing in Missouri are just



FARM RESIDENCE, PUTNAM COUNTY.

beginning to be appreciated, and there is perhaps greater opportunity for profitable investment in Missouri lands that are adapted to this crop than in

any other direction. In most countries where alfalfa succeeds, corn is not a success, and either the alfalfa must be shipped to the corn or the corn brought to the alfalfa. In Missouri both of these crops are grown on the same farm. If to these be added rich blue grass pastures, the ideal conditions for successful stock raising are realized.

Fortunate indeed is the State that is able to grow on all classes of soil at least two such renovating crops as clover and cowpeas. This insures an abundant supply of material to properly balance and supplement the corn and corn fodder crop; at the same time that the soil is kept in a high state of fertility and in the best possible mechanical condition for the growing of

other crops. The Missouri season is long enough to mature cowpeas profitably. From the latitude of Kansas City south, a crop of hay can be grown after wheat harvest or after a crop of early potatoes, or after a crop of timothy hay has been cut. The pea hay may be removed and the land sown to wheat, timothy, or any other fall crop without further cultivation. The yield is from two to four tons per acre, and in feeding value the hay is about the same as alfalfa or clover. In the southern third of the State, in addition to this hay crop, from 8 to 15 bushels of seed per acre, worth from \$1 to \$1.50, or from \$8 to \$22.50 per acre, are harvested.

For pasture purposes in connection with blue grass, white clover is one of the most valuable plants in the State. It is perennial and does not require to be seeded and grows most luxuriantly on all classes of our soils. Fortunately its maximum growth occurs the latter part of June and early July, at the time when the blue grass is usually dormant. It is particularly adapted to the gravelly and flinty soils of the Ozark region although it thrives everywhere and on all classes of Missouri soils.



BLUE GRASS ON MISSOURI AGRICULTURAL COLLEGE FARM.

Bermuda grass is rapidly spreading over southeast Missouri, covering all waste places and open fields that are grazed. When it is well established it will



SWEET POTATOES, NEWTON COUNTY.

Cowpeas—the clover of the South—thrive in Missouri.

Japan clover has covered South Missouri

Japan clover is one of the most nutritious of the clovers, and has now spread over practically the whole of the Ozark region. It thrives well in the timber as well as in open land, and furnishes valuable grazing through the latter half of the summer and early winter.

Bermuda grass covering South Missouri.



HAY ON HOLT COUNTY FARM.

live indefinitely, and in value closely rivals blue grass, and in the portions of the State that are adapted to it, will solve satisfactorily the pasture problem. There is no reason why it may not be made to cover the Ozark plateau and convert this region into a rich pasture.

Sorghum and  
Kafir corn grow  
in every county.

In capacity to produce large yields of valuable forage at a minimum expense, sorghum and kafir corn are second only to corn, and thrive well in every county in the State. The only reason they are not grown more extensively is that our soils and climate are so well adapted to corn that it is a more profitable crop.

Tobacco may be grown successfully in every county in the State. St. Louis is the leading tobacco market in the United States, and there is no reason why this industry should not be developed until Missouri is the leading tobacco producing state in the Union. The cost of producing an acre of tobacco in Missouri, including rent of land, cultivation, cutting, curing, stripping and delivering to market, is about \$32 per acre. The yield varies from 750 to 1,500 pounds per acre. In Platte and Schuyler counties the farmers often sell their tobacco crop for more than \$100 per acre.

Missouri leads all other States in the Union, according to the last census, in the yield of cotton per acre. Twenty-seven counties report cotton as a crop with 67,658 acres and an aggregate yield of 23,916,840 pounds worth at the gin, \$1,788,960. The bulk of this cotton is grown in Dunklin, Pemiscot, New Madrid, and Ozark counties. Dunklin county produced last year 13,858,200 pounds, worth \$1,390,365. Unimproved land in southeast Missouri that will produce a bale of cotton per acre, and other crops in proportion, may be bought for from \$9 to \$15 per acre. Improved cotton lands that are commanding an annual cash rental of from \$3.50 to \$5 per acre, may be bought in this region, convenient to gins and trunk lines of railway at from \$25 to \$45 per acre. On account of the ravages of insects in the southern cotton States it is probable that the cotton industry will be rapidly enlarged in this State.

Twenty-seven  
counties grow  
cotton.

The leading watermelon county in the United States, according to the last census, is Scott county, Missouri. The second most important watermelon county is Dunklin county, Missouri. These two counties alone produce more than one-fourth as many watermelons as the entire State of Georgia, and more



CORN PLANTING, NORTH MISSOURI.

than either Illinois, Iowa, Kansas, Indiana, Florida, or Arkansas, and as many as are grown by New Jersey and California combined. Scott county reports 7,000 acres devoted to watermelons, from which are shipped over three thousand cars, and 550 acres of cantaloupes, yielding 13,000 baskets.

It is estimated that southeast Missouri ships to the markets of the United States and Canada each year, approximately, 10,000,000 melons, representing an aggregate weight of 250,000,000 pounds. This is practically one melon to the head of every family in the United States. Allowing 40 feet to a car, this would make a solid melon train fifty-five miles long. The melons from southeast Missouri come into market about the middle of July—the season at which they are in the greatest demand—after the Georgia and Texas crops are exhausted, and before the crops of any other section of the country are ready.

The cost of growing melons in southeast Missouri up to the time of harvest is about the same as corn, and the average return per acre is between \$25 to \$40. Albert Stocks, of Kennett, made a net profit on 100 acres of melons of \$2,800, or an average of \$28 per acre, after deducting \$4 per acre for rental, and all expense of labor, seed, freight and commissions. This crop required his attention from March to July only. B. F. Marshall, of Blodgett, reports nineteen cars of melons which brought, on track at local shipping point, \$1,745 on 38 cars, or \$46 per acre.

Missouri farm  
lands not an  
experiment

To buy Missouri farm lands or engage in farming in this State is in no sense an experiment. The large outlay for drainage, irrigation or artificial fer-



FARM SCENE, STODDARD COUNTY.

tilizers required in other regions is unnecessary here. The conditions are all favorable for a bountiful harvest and rich returns.

Land worth \$100 per acre may be bought for \$50 in Missouri.

In the older States the best lands, with good improvements, in the best communities, with good markets, good transportation facilities, good roads, churches, schools, sell for from \$125 to \$200 per acre.

In Missouri these conditions may be exactly duplicated and land equally productive may be purchased at from \$40 to \$75 per acre.

Farm lands have advanced more than a third in Missouri during the last three years. In many portions of the State they have doubled in value. Compared with prices in other States, Missouri lands are still too low and are certain to advance.



WATERMELONS, SCOTT COUNTY.



WHEAT FIELD, RAY COUNTY.

Missouri's farm  
land the best  
investment, says  
United States  
Secretary of  
Agriculture

The Missouri farmer has no lean years. Feast does not alternate with famine.


Hon. James Wilson, United States Secretary of Agriculture, said in a recent address "in my judgment the best investment in the country is Missouri farm land."





CORN HARVESTING, NORTHWEST MISSOURI.



## LIVE STOCK

M

ISSOURI could not be better situated so far as climate and location are concerned for the development of the highest types of the domesticated animals. Between the severe rigors of the northern climate and the warm suns of the semi-tropical region, she possesses in a marked degree conditions which are favorable for the economical production of all classes of animals. Far enough north to escape the blistering suns of the southern lowlands, she escapes many of the serious diseases common to those regions; the insidious splenic fever does not intrude itself on Missouri pastures. Missouri's grazing lands are still far enough south that animals may be maintained exclusively on them for ten months in the year. The State has thus an unusual advantage over those sections of the country where the animals must be wholly supported for six months of the year on crops grown expressly for their winter sustenance. Missouri summers are never so hot nor Missouri winters so cold that expensive shelters are required for protection. Sixty-five per cent of all the cattle fattened in the State are fattened practically without shelter.

A nation or a state that reaches distinction for its live stock must not only have a favoring climate, a fertile soil, and intelligent people, but it must have available markets, and here Missouri stands without a rival. In the midst of a large population, with large cities north, south, east and west, she has at her doors a market for all the surplus animal products of the farm. All the surplus breeding animals are quickly absorbed by the great ranges of the West and Southwest. These favoring circumstances have conspired to make Missouri one of the greatest live stock localities in the world.

The value of the live stock industry in Missouri in 1903 was \$200,000,000. This does not include the value of farms, barns, and other equipment employed in the live stock industry. In total valuation she is exceeded only by Texas, Illinois, Iowa, and Kansas. There is no other single industry in the State that can compare with this in total value.

HEREFORDS, W. B. WADDELL, LEXINGTON;

C. G. COMSTOCK AND SON, ALBANY.



More than one-third of the entire population of the State is dependent directly or indirectly upon the business of producing the domestic animals. Not only is there an animal product also large animal product.

One-third Missouri's population dependent on the stock farm.

Stock farm the stable element.



enormous investment in animals, but the animal, as compared with other State industries, In 1899 the farmers' income from animals and products was \$97,000,000.

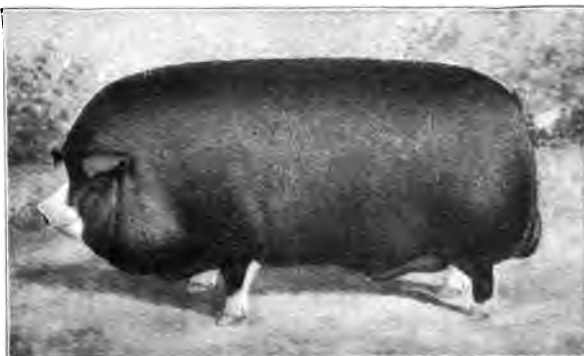
The stock culture. The live stock own home; he growth mean healthy rural social conditions.

farm represents the stable element in all agriculture. The tenant farmer is invariably a grain farmer. The farmer owns his farm; he builds and owns his lives upon his own farm; his success and his rural development, good rural schools and

Quality ahead of the average.

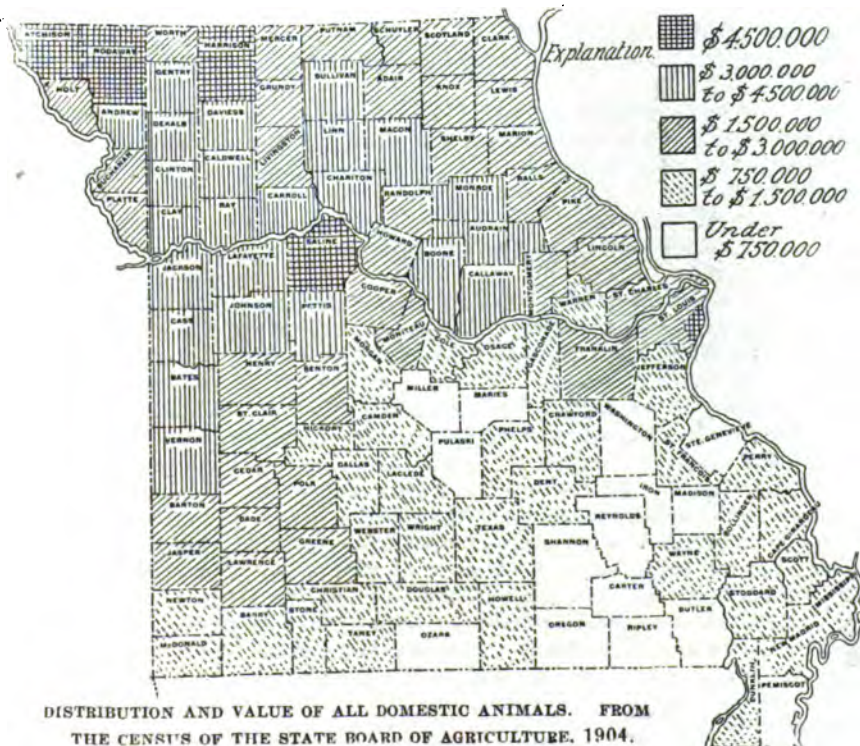
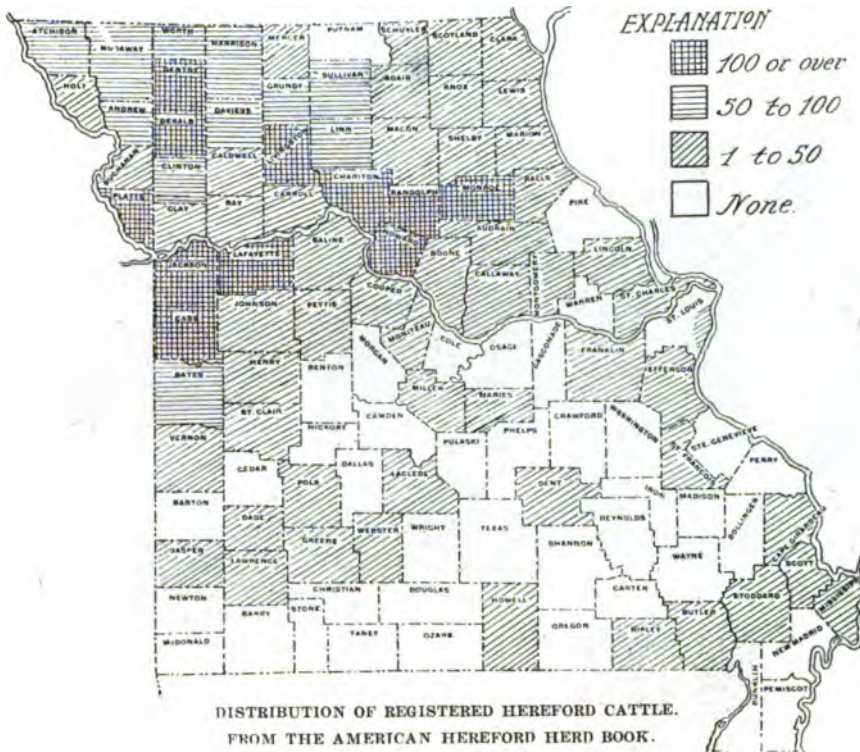
In the United States in 1899 were approximately 68,000,000 head of neat cattle, valued at \$1,477,000,000. Of this number Missouri possessed 2,978,000 head, valued at \$75,657,000. Missouri had four and one-half per cent of the number of animals in the United States, but this four and one-half per cent represented five per cent of the total value. The quality of the live stock in Missouri, therefore, is much above the average of the quality throughout the

United States. By the census valuation, one hundred Missouri cattle are worth as much as one hundred and eighteen cattle taken from the country as a whole. There are only four States in the Union that have a larger number of cattle than Missouri.



Four million and six hundred thousand swine are found within









HORSES OWNED BY J. H. PARKER, UNIONVILLE.

the borders of Missouri. This is seven per cent of the total in the entire United States. Only two States, Iowa and Illinois, have a larger number of hogs than Missouri.

More sheep than  
any bordering  
State.

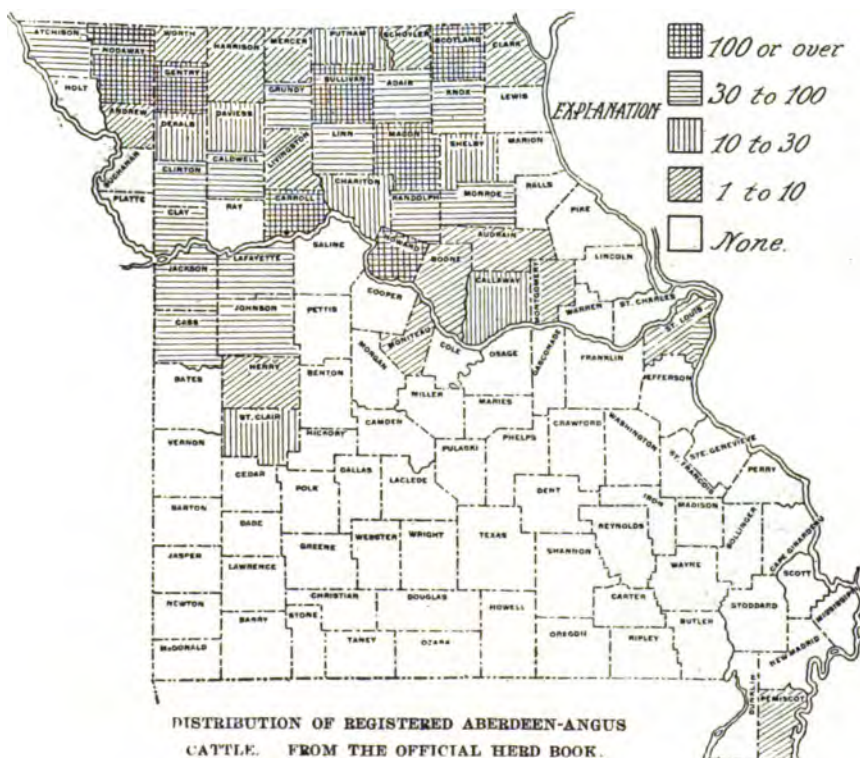
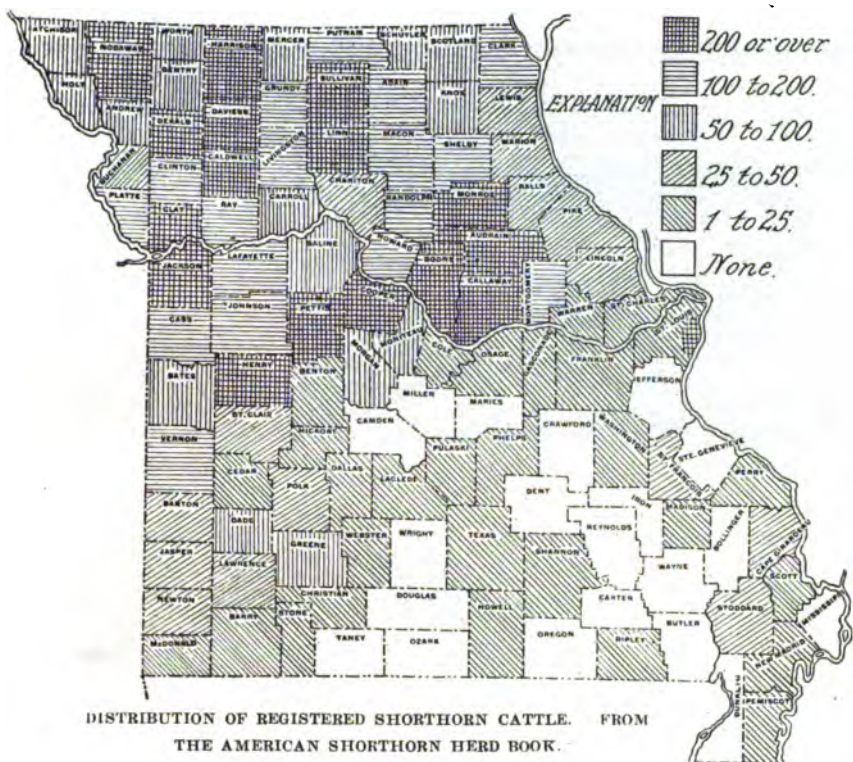
Missouri is not generally credited with being a sheep State, but she has more sheep than any bordering State except Kentucky. The number of sheep has rapidly increased in Missouri during the past ten years. She now has 1,096,000 head.

One-ninth of the value of Missouri live stock is represented by her mules. Missouri has 296,000 mules. This is nine per cent of the total live stock valuation.

More live stock  
than any other  
State

The live stock industry of Missouri is the principal source of profit to a million of its most stable citizens. There is no State in the Union whose farmers are so largely engaged in live stock production as are the farmers of Missouri. In the United States as a whole, only thirty-three per cent reported their principal income as coming from live stock and dairying; in Missouri 55.3 per cent. Missouri has more live stock farms than any State in the Union; one hundred and fifty-seven thousand, four hundred and seventy-two in number. This is evidence unimpeachable of a prosperous, contented and happy rural population. The social, economic and agricultural aspects of such a widespread interest in improved live stock are of the highest interest. The strictly grain farmer requires but a small investment of capital for the necessary tools to carry on his business. The live stock farmer, on the other hand, must not only possess the same tools but he must have a much larger amount invested in animals, in feed and in barns and sheds. Live stock farms have a higher value than grain farms, and this higher value is directly traceable to the production of live stock on such farms. The typical live stock farm (including equipment) is worth \$4,101.08, while the hay and grain farm is worth only \$3,634.18 or a difference of \$566.90. It is, therefore, an economic advantage to have the farmers of any given locality interested in the handling of cattle,

Value of a live  
stock farm.



horses, sheep and swine. That which is an advantage to the local community, must be equally advantageous to the State. Missouri stands at the head of all other States in the Union in number of stock farms.

Eighty per cent of all the available elements of plant food removed from the soil are returned in the excrement of the animals. Attention to live stock husbandry explains at once the wonderful fertility of Missouri's cultivable area. There is scarcely a State in the Union whose annual production is so constant and unchanging from year to year as Missouri. The accumulated fertility of Missouri's farming lands continues to produce under all circumstances of wind or weather.



LADY LEE L. 33469—N. H. GENTRY, SEDALLA.

stant and unchanging from year to year as Missouri. The accumulated fertility of Missouri's farming lands continues to produce under all circumstances of wind or weather.

The 157,000 stock farms of Missouri represent a total area of 20,720,000 acres.

This is an area larger than that comprised within the borders of the States of Connecticut, Massachusetts, Vermont and New Hampshire. There are seven other States in the Union each of which has a total area less than that devoted to live stock farming alone in Missouri.

The total amount of money invested in live stock farms and the necessary equipment for the carrying on of live stock operations in the State of Missouri is \$646,380,516.

The total amount of money devoted to the animal industry in Missouri is more than is invested in the same industry in the States of Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, Delaware, Maryland, South Carolina, North Carolina, Georgia, Alabama, Louisiana, Mississippi, North Dakota, Arizona and Nevada combined. These States have an area nine and one-half times as large as Missouri.

DOUBLE MARY—  
W. P. HARNED, VERMONT.



With one-fifty-second the area of the United States (including Alaska) she has one-fourteenth of the wealth invested in live stock farming. The largest manufacturing industry in the great manufacturing State of Massachusetts is the textile industry. The amount of money invested in this industry in Massachusetts is only \$274,332,000, a little over one-third the amount invested in live stock and dairy farming in Missouri.

With one-fifty-second the area of the United States (including Alaska) she has one-fourteenth of the wealth invested in live stock farming. The largest manufacturing industry in the great manufacturing State of Massachusetts is the textile industry. The amount of money invested in this industry in Massachusetts is only \$274,332,000, a little over one-third the amount invested in live stock and dairy farming in Missouri.

Missouri at the head in number of stock farms.

Larger area of stock farms than the total area of seven States.

One-fourteenth of the live stock in cattle.



MISSOURI CATTLE 2653—M. E. MOORE, CAMERON.

Of \$219,000,000 received from farm products of Missouri, \$142,000,000 came from the sale of products from live stock farms. This is 65 per cent of the total income from the sale of farm products from 50 per cent of the farms and 61 per cent of the total farm area. This income represents \$6.86 per acre. All other farms, exclusive of live stock and dairy farms, produce at the rate of \$5.81 per acre. Thus the live stock farm of Missouri produced at the rate of \$1.05 per acre more than the grain farms. If all the live stock farms of Missouri had for a single year been turned into grain farms, the diminished income to the State would have been \$22,000,000.

It is to the advantage of any State or Nation to have its farming lands owned by the tillers of the soil. Sixty per cent of the stock farms of Missouri are owned by the men who till them.

Sixty per cent of Missouri stock farms owned by the men who till them.

The equipment on the average Missouri stock farm includes fifteen neat cattle, four horses, one mule, twenty-six hogs, five sheep and a fraction of a goat. The investment in live stock for each of these farms is \$6.96 per acre or \$915 for the whole farm. The total value of the farm is \$4,101.

The productive power of Missouri farming lands can be illustrated in no better way than by the annual returns per acre. The live stock and dairy farms of the United States produce at the rate of \$5.12 for each acre. The same class of farms in Missouri yield \$6.86 per acre. The report also states that the Missouri farmer spends twenty-nine cents per acre for labor and fertilizer, while the same farmer throughout the United States expends thirty-eight cents per acre for labor and fertilizer. The net difference in favor of the Missouri farm per acre is \$1.82. It is often stated that the produce from an acre of New England land is far greater than from the same area of the western farm. Census reports do not indicate that there is any such difference notwithstanding the careful intensive methods employed by the eastern farmer and the much higher price received for farm products.

A comparison of the income per acre from Missouri live stock farms with the similar income in the Atlantic States shows that in spite of the intense culture and nearness to markets, the Missouri live stock farmer receives a greater income per acre than the eastern farmer. The Missouri live stock farm yields a gross income of \$6.86 per acre, the eastern farm of this class yields \$6.22 per acre. But this is not all the story, for on account of a more fertile soil and a long pasturing period the Missouri farmer spends less for labor and fertilizer. While the live stock farmer



JUDGE C. M. DALBY  
AND JACK  
GROVER CLEVELAND.



JACKS, LIMESTONE  
VALLEY.





THIN RIND HOGS—HERD OF W. F. DAVIS.

Annual returns per  
acre.

of the Atlantic States spends sixty cents per acre for this item, the Missouri farmer spends only twenty-nine cents. Thus the Missouri live stock farm is yielding a net profit of ninety-five cents per acre more each year than the same class of farm on the Atlantic Coast. The average Missouri live stock farm is yielding \$124.93 more than the live stock farm of the same size in the Atlantic States.

Every important  
breed represented  
in the State.

Every important breed of cattle, horses, sheep and swine is represented in the State. The cattle breeds found here are Shorthorn, Hereford, Aberdeen-Angus, Galloway, Jersey, Holstein, Red Polled, Polled Durham, Polled Hereford, Brown Swiss, Devon and Guernsey. The breeds of hogs are Poland-China, Duroc-Jersey, Berkshire, Chester Whites, Essex, O. I. C., Tamworth, and Large Yorkshires. The different breeds of horses in Missouri are American Saddle Horses, Standard Bred Trotter, Percheron, English Shire, Belgian, Clydesdale, Cleveland Bay, Shetland Pony, German Coach, French Coach, Thoroughbred and Morgan. Sheep are represented by Shropshires, Hampshires, Southdown, Rambouillet, Merino, Cheviot, Suffolk, Dorsets, Hornless Merino and Persian Sheep. Angora goats are also common.

Registered Cattle.

There are more than 50,000 head of pure bred registered cattle in the State. There are 4,000 bulls in the State which are registered. This means

WITH TRIPLET  
CALVES—  
HAMP B.  
WATTS,  
FAYETTE.



that ten per cent of the bulls are pure bred and registered. The number of registered cattle are approximately: Shorthorn, 25,000; Herefords, 18,000; Aberdeen-Angus, 3,000; Galloways, 1,500; Jerseys, 1,500 and all other breeds 1,500. In every market of the world Missouri cattle are known and their excellence is universally admitted.

If the sale records for the past ten years are evidence of high quality, then Missouri must be given a high place among the most famous breeding localities in the world. The results of the efforts of Missouri's skillful cat-

Forty-three head  
averaging \$2,200.

tle breeders have been appreciated. The records of sales show that forty-three head of Missouri cattle have sold for \$95,460. The name of the owner, name of the animal and the breed, together with the price received are shown in the accompanying table:





FEEDING CATTLE—

TURNER MCBAIN, BOONE COUNTY.

GALLOWAYS—

C. N.

MOODY,

ATLANTA.



SHORTHORNS, C. D. BELLOWS, MARYVILLE.

## PRICES RECEIVED FOR MISSOURI ANIMALS.

ANIMAL	OWNER	PRICE	BREED
Thickset	T. F. B. Sotham	\$5,100	Hereford
Sir Bredwell	T. F. B. Sotham	5,000	Hereford
Columbus 17th	Benton Gabbert	5,050	Hereford
Betty 2d	Overton Harris	4,500	Hereford
Good Cross	T. F. B. Sotham	4,000	Hereford
Lucia Estill	Wallace Estill	2,800	Aberdeen Angus
Glaucus	G. R. Rennolds	2,500	Hereford
Armour rose	C. W. Armour	2,500	Hereford
Highland Maid 7th	L. W. Towne	3,600	Shorthorn
London Duchess of B.	J. H. Kissinger	2,700	Shorthorn
Knightly Belle	J. H. Kissinger	2,275	Shorthorn
Kissinger's Breastplate	J. H. Kissinger	2,200	Shorthorn
Caroline Cochrane	J. H. Kissinger	2,100	Shorthorn
Black Knight of Estill	Wallace Estill	2,100	Aberdeen Angns
Illustrious 3d	J. H. Kissinger	2,050	Shorthorn
Blackbird of Woodland	Wallace Estill	2,000	Aberdeen Angus
Premier	Overton Harris	2,000	Hereford
Alice's Prince	A. A. Wallace	2,000	Shorthorn
Locomotive	Jeff Bridgeford	2,000	Shorthorn
Loudon Duke 6th	J. G. Cowan	1,950	Shurthorn
Highland Maid 5th	L. W. Towne	1,900	Shorthorn
2nd Louan of Linwood	J. H. Kissinger	1,850	Shorthorn
Mattie Richardson	J. H. Kissinger	1,805	Shorthorn
Caroline Airdrie	J. H. Kissinger	1,800	Shorthorn
Nonpareil of C. B.	Geo. P. Bothwell	1,710	Shorthorn
Bride 15th	J. H. Kissinger	1,675	Shorthorn
Orphan Gwynnee	J. H. Kissinger	1,650	Shorthorn
Galetea	T. F. B. Sotham	1,650	Hereford
Nonpareil Hero	George Bothwell	1,610	Shorthorn
Mazurke of Linwood	J. H. Kissinger	1,600	Shorthorn
Highland Maid 8th	L. W. Towne	1,600	Shorthorn
Lady Hester 3d	L. W. Towne	1,600	Shorthorn
Excellent	T. F. B. Sotham	1,575	Hereford
Fullfiller	T. F. B. Sotham	1,510	Hereford
Red Beauty	J. H. Kissinger	1,500	Shorthorn
Grandee	T. F. B. Sotham	1,500	Hereford
Troublesome	O. Harris	1,500	Hereford
Lucy Estill	Wallace Estill	1,500	Aberdeen Angus
Muscovite	Jeff Bridgeford	1,500	Shorthorn
Jennie June	T. J. Wornall	1,500	Shorthorn
Phoebe	J. H. Kissinger	1,500	Shorthorn
Viscount of Anoka	T. J. Wornall	1,500	Shorthorn
McDougall 4 of Tarbreuck	C. N. Moody	1,500	Galloway

Forty-three head sold for a total of \$95,460 or an average of \$2,220. Each of the 43 head sold for more than \$1,500, while 19 sold for more than \$2,000. Of these 13 were Herefords, 1 Galloway, 4 Aberdeen-Angus, and 25 Shorthorns.

Shorthorn Cattle.

Shorthorn sometimes call Family in the In Missouri popular breed its highest de ble specimens ers' art, devel ful feeders, in every State. On there are evi power of this breed to im mon stock of

Main development in Missouri.

The Short cattle is a the intelli British farmer. tures and fa mate which horns enjoyed



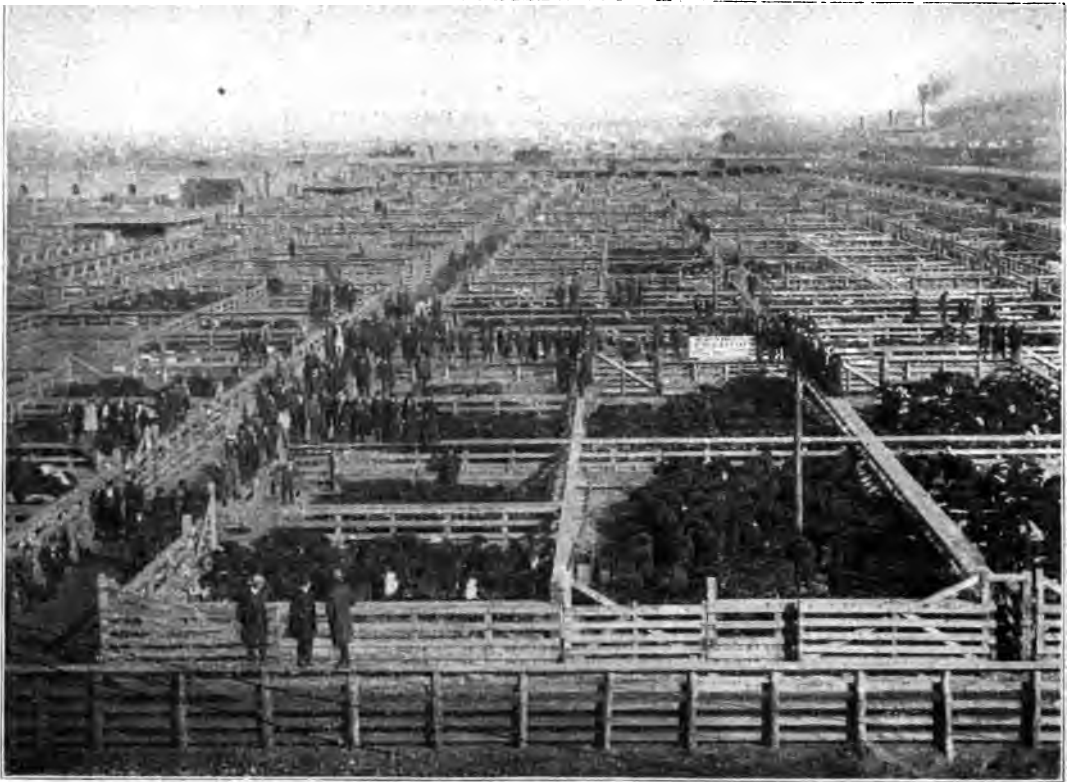
CORRECTOR.

cattle are ed the Royal cattle world. this old and has attained velopment. No- of the breed- oped by skill- may be found county in the every hand dences of the prepotent prove the com- the country. horn breed of monument to gence of the The rich pas- vorable cli- these Short- in their native

country is nowhere so well imitated as in the mild and equable climate and broad pastures of Missouri. Missouri is one of the favored localities and the Missouri breeders of Shorthorns do not hesitate to maintain that there is no quality nor excellence that the nutritious herbage of this great commonwealth together with her equable climate can not duplicate.



OWNED BY C. D. BELLOW, MARYVILLE.



SECTIONAL VIEW OF ST. JOSEPH STOCK YARDS.

The first Shorthorn cattle ever taken west of the Mississippi river were those taken to Cooper county, Missouri, by the late Nathaniel Leonard. In 1839 this pioneer established the Ravenswood Herd of Shorthorn cattle which to this day is successfully breeding high class Shorthorns. It is said that his Shorthorn bull was pure white. Mr. Leonard purchased at the same time a heifer. These two animals together cost \$1,100. From these two animals many fine Shorthorns were produced which were shown at the early Missouri fairs. Some famous breeders of Shorthorns in the early times were Hutchinson, Warfield, Brand, Castleman and Wilson, of Cooper county; Larimore, of Callaway county; Hughes, Pettis county; Brown, Saline county; Doneghy, Jackson county; Hubbell, Ray county; Bryan, Ray county; Talley and Pilman, St. Charles county; McDonald, Grundy county; McHatton and Phillips, St. Louis county; Richard and William Gentry, Pettis county; Block, Pike county. At a little later time the names of C. E. Leonard, Jeff Bridgeford, John G. Cowan, the Duncans and J. H. Klissinger became prominent in Shorthorn history. The missionary work of these pioneer breeders has resulted in distributing Shorthorn cattle throughout every portion of the State. There are at the present time 2,340 breeders of Shorthorn cattle in Missouri.

First Shorthorn  
cattle.



COTSWOLD SHEEP—HOPSON GLASCOCK, OAKWOOD.

High prices paid for  
good cattle.



From June, 1902, to June, 1903, 5,610 calves were recorded from Missouri. This is one-eighth of the total number of animals recorded in the American Shorthorn Herd Book from the entire United States. There are five Short-

horn bulls in the State of Missouri that have together produced 1,000 calves and these calves are valued at \$115,000. Nonpareil Victor and Grand Victor, two Missouri bulls owned by Bothwell, have together produced 450 calves which are valued at \$60,000. Missouri breeders of



IMPERIAL WANDERER'S  
LASS 158478 AND  
NONPAREIL OF CLOVER  
BLOSSOM—  
GEO. D. BOTHWELL.  
NETTLETON.



Breeders of Short-  
horns.

Shorthorns report ten Shorthorn cows owned by T. J. Wornall, J. H. Novinger, June K. King, E. P. Wilkerson, Jeff Bridgeford, Purdy Brothers, John Harrison, and George Bothwell, as having produced 81 calves valued at \$28,725. The prices which experienced breeders are willing to pay for highly improved cattle represents to a certain extent their actual value. The Missouri Shorthorn breeders, Kissinger, Wallace, Bridgeford, Cowan, Towne, Bothwell and Wornall, have sold 13 Missouri Shorthorns for \$27,840; this is an average of more than \$2,000 per head. C. D. Bellows reports that his sales of Shorthorn cattle from his own herd for thirty-six months immediately preceding November, 1903, averaged \$1,000 per month. The supreme test of quality comes when cattle contest in the show ring against the best bred animals of the world. Here Missouri Shorthorns hold a high place.



OWNED BY WILLIAM DICE, MAYSVILLE.

Other breeders of Shorthorns are W. P. Harned, Mrs. J. H. McGinniss, W. A. Mustain, W. W. Brown, Robert Blurton, E. L.

Willeford, A. G. Odell & Son, A. H. Williams, R. W. Musgrove, Judge Lafayette Torrey, S. T. Davis, Melvin Gregg, W. L. Nixon, Z. F. Higginbotham & Son, C. C. Carpenter, E. H. Hurt & Son, Hallwood Stock Farm, J. F. Taylor, John H. Burrus,

T. A. Martin, William Lee Harris, W. H. Richter, J. A. McLanier, Willis Knox, W. H. Berry, J. W. Zimmerman, Sanford Smith, H. L. Shidler, Albert Camp, C. C. Creswell, August King and Missouri Agricultural College.

The breeding of pure-bred cattle is a profitable business. Seven Missouri breeders, Wornall, Burruss, Novinger, King, Wallace, Bridgeford and Purdy Brothers, report having sold 2,618 animals for \$344,950. To this list can be added the names of Bothwell, Leonard, Gentry, Harned, Bellows, Casey and hundreds of others.



Not only the large FIRST PRIZE HERD, STATE FAIR, 1903—T. J. WORNALL & SON, LIBERTY. breeders who invest thousands of dollars and advertise extensively, but the smaller dealers also find the breeding of Shorthorn cattle a profitable venture. Mr. T. J. Payne, of Sweet Springs, Missouri, purchased the Shorthorn cow Woodford Belle III in 1888 for \$32.50. He has sold ten of her offspring for \$1,100 and has now on hand ten head worth \$1,100.

Missouri possesses more registered Herefords than any other State in the Union. She has, in fact, nearly twice as many representatives of this popular breed of cattle as Iowa, Illinois, Kansas or Nebraska. One-fifth of all the registered Herefords in America are owned in Missouri. Five of the ten highest priced Herefords ever sold in the world were produced and sold by Missouri breeders. The breeders of Missouri Herefords have easily distanced all competitors in the production of high class cattle. Whether we measure their successes by show yard victories, or from the standpoint of the prices received at the great auction sales, Missouri must be given a high rank among Hereford cattle breeders.

Hereford cattle.

Twice as many registered as any other State.

The breeders of this State occupy a strategic position in reference to the markets of this country. They are almost in the center of the great corn growing and cattle feeding district. They are located at the very gateway of the great western range country. They are also within easy reach of the southwest cattle country which absorbs thousands of our best breeding animals. The Missouri Hereford breeder has been quick to take advantage of this favorable circumstance. Missouri Herefords are scattered all over the west and southwest. The attractive white faces of this wonderfully prepotent breed of beef

cattle are found in thousands of feed lots in the great Middle West. The enterprise of the Hereford breeders of this State has made them formidable rivals of the Shorthorn, Aberdeen-Angus, and Galloway breeds. Seven Herefords sold by Armour, Gabbert, Harris,

Strategic position of the breeders.



ISAAC 177880 AND  
MISS POLLY 177881, AGED  
EIGHT WEEKS—MRS. G. C.  
MOSHEE, KANSAS CITY.



CATTLE—FRED B. PARSONS, KNOX COUNTY.



ON FARM OF T. J. WORNALL &amp; SON, CLAY COUNTY.

Fine record of  
Missouri animals.

at \$61,170. Sotham's bull Corrector has to his credit 189 calves valued at \$78,440. Harris' best bull Benjamin Wilton has sired 200 calves with a total value of \$75,000. Other breeders in the State who have made good records are Wehrman, Dette Brothers, Flock, Boney, Lamb, Spelman, Shirkey, Baskett, Swinney and Taylor.

Many of the best Hereford breeders in the State have begun with one cow.

It is interesting to know what some of the larger breeders of the State have received from the produce of some of their best cows. Armour, Gabbert, Harris, Sotham and Funkhouser report that nine cows owned by them produced a total of 85 calves, and these 85 calves were valued at \$72,620—each of these breeders having owned a cow whose produce brought more than \$5,000.

Prices received by  
breeders.

The amount of money paid for highly bred Hereford cattle in the State of Missouri is very large. The combined sales of seven Missouri Hereford breeders represent a total of \$1,073,283, and six of the breeders report having sold 5,525 animals.



EXILE OF SPRING LAWN 46304, SHELFMAN &amp; HEADLEY, SPRINGFIELD.

## NUMBER OF REGISTERED HEREFORDS SOLD WITH AMOUNT RECEIVED.

Some high-priced  
Herefords.

	<i>No. of Animals.</i>	<i>Am't Rec'd.</i>
Charles W. Armour .....	120	\$ 276,383 00
H. C. Taylor & Son .....	700	90,000 00
Benton Gabbert .....	200	46,345 00
Overton Harris .....	500	125,000 00
T. F. B. Sotham .....	185	131,000 00
Scott & March .....	1,800	265,000 00
James A. Funkhouser .....	720	139,555 00

**\$1,073,283 00**



PREPARING MULES FOR MARKET—R. R. BUCKNER, AUDRAIN COUNTY.

It must not be supposed that success in breeding high class cattle is attained only by the large breeders. Many men have started with one or two animals and have achieved very satisfactory results. J. C. Hartzler, of East Lynne, bought twin Hereford heifers nine years ago. He has sold during the time \$3,145 worth of stock and has now on hand sixty head of cattle. George Ess, of Clark, Missouri, bought one cow eight years ago and has since sold twelve animals for \$1,250.

No other breed of cattle ever handled in the State of Missouri has had a more successful show yard career than the Hereford breed. In every great stock show of recent years, Missouri Herefords have won the lion's share of prizes. At the International and State Fairs for the last fifteen years Missouri Herefords have won 563 first and champion prizes. No other State in America has ever won so many prizes on Hereford cattle in the same length of time. During the first four years the existence of the great International Live Stock Show at Chicago, Missouri

breeders made 251 entries in the Hereford classes. This is more than one-third of all the entries made at the same show by all the States and Canada combined. It is twice as many as were entered by Illinois; it is twice the number shown by Indiana, and six times as many as entered by Iowa. The records of the Hereford Association show that Kansas stands next to Missouri in the registration of Hereford

Prizes for Missouri Herefords.

No other State so successful.

More than one-half of all prizes.



JACK FROST,  
YOUNGEST MISSOURI BREEDER, WITH KING TOM,  
FIRST PRIZE BERKSHIRE UNDER SIX MONTHS.  
STATE FAIR.

calves, but Missouri has successfully exhibited eight times as many cattle at Chicago. Not only has Missouri been largely represented in the Hereford classes at Chicago, but she has taken more first and champion prizes than all the States and Canada combined. With a little more than one-third of the cattle exhibited she has won more than half of all the first and championship prizes. During the whole history of the International Show, Missouri has carried off 50 of the 84 first and championship prizes given to Hereford cattle. At the same show for the same period Missouri took exactly half of all the second prizes offered. She has, therefore, won more championship, first and second prizes than all the rest of the North American Continent combined. It is, therefore, no cause for surprise that five of the ten highest priced Herefords in America were Missouri Herefords.

Gudgell & Simpson, of Independence, Missouri, maintain one of the largest breeding establishments in the world. These gentlemen were successful exhibitors at the World's Fair in Chicago and have sold perhaps a larger number

of registered Herefords than any other one firm. This firm has exhibited more pure-bred and grade Herefords in the fat classes at the great national shows than any other in Missouri.

Other large Hereford breeders are Sheridan Henry, J. R. Law, J. M. Harman, Yates Brothers, S. L. Standish, W. S. Grubbs, J. M. Rennolds, C. B. Smith, S. L. Brock and Missouri Agricultural College.

Aberdeen-Angus  
cattle.

The breeders of Aberdeen-Angus cattle in Missouri claim that their cattle have succeeded in topping the Christmas market oftener than any other breed.



BROWN SWISS CATTLE—HARRY MCCULLOUGH, FAYETTE.

In the fourteen years ending with 1903, Aberdeen-Angus cattle topped the Christmas market 13 times. The feeders and breeders of Angus cattle in Missouri furnished six of these market-topping loads. The men who fed these cattle were Hudson, Brandon, White and Eubank. Thus, Missouri has furnished practically half of the market-topping cattle of the United

Half of the market-  
topping cattle.

States for the last fourteen years. It is interesting to note in this connection that five of the market-topping loads of fat cattle from Missouri were fed by Carroll county feeders at Carrollton, Missouri. It is also significant that nearly all of these high selling cattle were sired by Imported Kabul, a well-bred "Pride" bull by Young Viscount. Among the sons of Kabul was the Erica bull El Rey, who was so long at the head of W. H. Elliot's herd. The dam of Paragon of Estill, the Junior Champion bull of 1890, was also a daughter of Imported Kabul.

In the show ring the Missouri Aberdeen-Angus enjoys the reputation of having successfully won the best prizes more continuously than any other breed in this State. The victorious show yard career of Wallace Estill in competition with the world has perhaps seldom been equalled. For five years he was never defeated by any other Angus herd. At the World's Fair in Chicago he won nine out of thirteen first prizes offered. At the dispersion sale of this herd 72 head of cattle sold for an average of \$579.32. This is the highest average price ever recorded for Angus cattle in America. Black Knight, of Estill and Lucia Estill sold for \$2,100 and \$2,800 respectively. These two are among the six highest priced Aberdeen-Angus cattle ever sold in this country.

Victorious show  
career unequalled.



JEFF BRIDGEFORD, AGED 81 YEARS, ON ARTIST MONTROSE—WON FIRST PRIZE AS GENTLEMAN RIDER AT CHICAGO WORLD'S FAIR, AT AGE OF 70 YEARS

The produce from five Aberdeen-Angus cows owned by Rea, Andrews, England, Hadley and Orear, sold for \$9,750, an average of nearly \$2,000 per cow.



ABERDEEN-ANGUS—W. J. TURPIN, CARROLLTON.

James H. Rea reports having sold 308 head of cattle for \$38,500. Some breeders have found the breeding of Aberdeen-Angus cattle a very profitable venture. L. F. Hadley, of Ford City, bought \$400 worth of Aberdeen-An-

High prices for Angus.

gus foundation stock in February, 1897. In December of the same year he sold all but two of the calves produced from these animals for \$450.

That Aberdeen-Angus cattle have not lost their great fecundity may be seen from the following reports of some of her best breeders. Joseph H. Rea reports having owned a cow that produced 14 calves which were valued at \$2,500. A cow owned by W. M. England dropped 10 calves valued at \$1,500. George W. Hadley's best cow produced 13 calves valued at \$1,500. John P. Greer at one time possessed an Angus cow that in her lifetime gave birth to 14 calves which were valued at \$3,000. The prices that have been received for Missouri Aberdeen-Angus cattle show that there is profit in this hardy and early maturing breed. Culver, Rea, Andrews and Hadley sold 19 head of Angus cattle for \$5,000. Some noted Angus bulls that have been owned in Missouri are Imported Bush Ranger and Estill Eric, both owned by Elliott and Estill. Polar Star, a bull owned by H. W. Elliott has sired more recorded calves than any Angus bull in America for the same period. Among the herd headers produced from this bull were Bunce, Lengthy Duke, He's a Hero, He's a Star, and Ermoor.

Reports from breeders.



FIRST PRIZE HEREFORDS—S. L. BROCK, MACON.

The Angus cattle have ever been favorites in the feed yard, owing to their vigor, thrift and early maturing qualities, and while they do not exist in such large numbers in the State as some of the other beef animals, they have ever been popular with the handlers of beef cattle everywhere.

Other noted breeders of Angus cattle in Missouri are W. J. Turpin, Joseph E. Withers, John F. Coulter, Omer Catterson, Berry Lucas, R. S. Williams, E. E. Axline, N. R. Tracy, J. E. Creel, W. M. England and Elm Park Cattle Company.

Galloway cattle.

The wonderful adaptability of Missouri's soil and climate to the production



GALLOWAYS—W. M. BROWN & SON, CARROLLTON.

of all kinds of live stock is nowhere better illustrated than in the successful breeding and handling of the sturdy Galloway breed. This hardy and vigorous breed of cattle from the bleak climate of Scotland has thrived wonderfully on our rich pas-

Hardy and vigorous breed.

tures and generous feed. The first Galloways ever imported into Missouri were brought here by A. B. Matthews. According to the Secretary of the Galloway Association there were recorded in the United States in the year ending June 1,

1903, 2,006 Galloway cattle. Of these 343 were recorded from Missouri. In other words, Missouri owns one-sixth of all the Galloways in America. At a conservative estimate there are 1,500 head of registered Galloway cattle in the State. One of the largest and most successful breeders of these good cattle in the United States is C. N. Moody, of Atlanta, Missouri. During the last seven years Mr. Moody has sold 300 registered Galloways for approximately \$30,000; two of these sold for \$2,615, and six sold for a total of \$5,240. The prizes won by this breeder in three years amount to \$3,800. One cow in this herd produced 5 calves valued at \$2,100. The owner of this herd bought McDougal, the highest priced Galloway bull ever sold in the world. Some of the leading breeders in the State not mentioned above are W. M. Brown & Son, H. H. Harris, J. M. Lowe, M. R. Platt, L. M. Winslow, F. P. Wild, I. C. Huntington, J. B. Thompson, and Philo Lasher.

Dairy Cattle.

The development of dairy breeds of cattle is naturally co-extensive with the highest development of the dairy industry. In the eastern and northern States

HEREFORDS—  
GUDGELL & SIMPSON,  
INDEPENDENCE.



where dairying is the principal industry, we should expect to find the dairy breeds flourishing and numerous. In Missouri, where the production of beef is of primary importance, we would expect to find the highest types of beef breeds. This is in fact the case, but while Missouri does not rank with some other States in extent of

her dairy industry, yet in the production of dairy cattle she has been unusually successful. One of the largest and most successful exhibitors of dairy cattle is M. E. Moore, of Cameron, Missouri, a breeder of Holstein-Friesian cattle. This gentleman has for twenty years been breeding, handling and showing this highly efficient dairy breed, producing in that time 544 animals. The total sum received for these animals was \$67,485. The total sum received for the five best animals was \$5,000. But the most remarkable success perhaps of this breeder was in competition with the best cattle of this breed at the leading national and international shows of America. This successful exhibitor has won 800 first prizes and \$16,755 in money premiums. In the year 1890 he won \$2,000 in premiums. His best bull produced 150 animals that were valued at \$3,250. The best cow produced 8 young which were valued at \$3,000. In addition to the above, this famous herd has won seven silver cups and thirty medals. One of his most widely known cows is Shady Brook Gerben whose official butter test was 23.07 pounds in seven days. This cow made four pounds of butter in one day, and wherever shown won every first prize offered for butter test at every Western State Fair, also at St. Louis and Atlanta, Georgia.

Great record of a  
Missouri  
exhibitor.



PRIZE HEREFORDS—TURNER MCBAIN, BOONE COUNTY.

Holstein-Friesians are also bred in Missouri by the Missouri Agricultural College, John Clancy, Joseph Barmann and William McWilliams.

The popular Jersey breed of cattle is well represented in the State. E. J. Shelman, a breeder of Springfield, Missouri, has sold 210 Jerseys in 15 years for a total sum of \$42,000. Five of his best animals sold for \$3,200. Five of his best cows produced 35,000 pounds of milk and 1,900 pounds of butter in one year. The best milk record from a member of this herd is 8,500 pounds.

One of the best producing Jersey herds is owned by S. W. Coleman, of Sedalia, Missouri. He maintains a herd of from 6 to 10 cows, half of which are two years old, and this herd produces an average of 400 pounds of butter per year, every pound of which sells readily at 25 cents the year around, thus making an average of \$100 to the cow. The best cow in this herd produced 9,600 pounds of milk which made 500 pounds of butter in one year.

Another herd of Jerseys is owned by Dr. T. A. Still, of Kirksville, Missouri. This is an excellent herd of highly bred cattle.

The Missouri Agricultural College maintains an excellent herd of pure bred Jerseys and Holstein cattle. Eight cows in this fine herd produce more than 400 pounds each per annum. One, May Bates 108674 A. J. C. C., produced 500 pounds of butter in 1903. The annual income from each of 15 cows in this herd is \$125.

Other Missouri men who breed Jerseys are: D. L. Bartlett, Michel Hilgert, Rolla Oliver, H. G. Lewelling and T. E. Wardell.

Every important breed of cattle is represented in the State. Red Polled cattle are successfully bred by L. T. Henry, of Eolia, Missouri, T. N. Flournoy, Shannon Staten, David Cady, and D. D. Updyke. The latter breeder has sold thirty-six animals in eight years for a total of \$3,840.

Missouri fat cattle have sold for the highest price on the Christmas market six out of fourteen times in the past few years. If it were possible to determine the best loads of cattle sold throughout the year, Missouri would undoubt-

Jersey cattle.

Fine herds.

Other important breeds.



MULES AND CATTLE—W. A. ELGIN, PLATTE CITY.



edly have a larger proportion of high priced cattle than any State in the Union. This State has ever been foremost in the finishing of high class cattle for the fat stock markets. The enormous areas of corn, blue grass pasture and hay have made it possible to place on the market highly finished products.

How cattle are fed.

The methods by which cattle are fed and ultimately finished for the consumer, are well illustrated in Missouri. The most important class of cattle feeders are those who buy thin cattle or stockers, feed them for a short period on grain and hay or pasture, and sell them on the market. A careful investigation of the methods employed by this class of feeders show that forty per cent of all the cattle thus purchased for fattening are two years old. Thirty-four per cent of the remainder are from two to three years old. The average number of days during which these cattle are fed a full ration of corn is 180. The weight of the cattle at the beginning of the feeding period is 1,367.

Grain rations used.

The grain ration fed in a great majority of cases is shelled corn. In certain districts cottonseed meal is used to supplement the corn. Timothy hay, wheat straw, oat straw, flax straw, corn stover, millet, sorghum, and clover hay are all used as roughness. These methods have been greatly influenced in recent years by investigations carried on at the Missouri Experiment Station. Under the efficient direction of



HAMPSHIRE RAM  
AND FAT LAMBS  
OWNED AND FED BY  
MISSOURI  
EXPERIMENT  
STATION.

Dr. H. J. Waters these cattle feeding experiments have been conducted for eight years. These experiments have included a careful test of all the principal feeding methods employed in the State together with more profitable methods which have been determined by the Station. That this Station has been successful in the production of well finished beef cattle can be seen from the fact that the highest priced load of beef cattle sold in the Chicago market in the year



1903 was fed at the Missouri Experiment Station. Some of the experiments conducted at this Station are of the greatest economic importance. In one experiment in feeding cattle in the winter it was found that with a ration of six pounds of corn and sixteen pounds of timothy hay each animal gained one pound per day. Another lot of cattle of the same age and condition gained exactly two pounds per day on exactly six pounds of corn and seventeen pounds of clover hay. In general it has been found that any nitrogenous roughness like clover hay, cow-pea hay, or alfalfa hay has increased very materially the efficiency of the ration fed, and in every case has increased the profit.

The Missouri  
Experiment  
Station.

Missouri College of  
Agriculture.

The State has not neglected to provide splendid facilities for instruction and investigation in Animal Husbandry. The Missouri College of Agriculture maintains a farm of 600 acres, well stocked with cattle, sheep, and swine. Typical specimens of Shorthorn, Hereford, Aberdeen-Angus, Jersey, and Holstein cattle



JACKS AT STATE FAIR—SEDALIA.

are continually maintained for purposes of instruction. Thorough instruction is offered by this institution in Stock Breeding, in the history and development of breeds, and in feeds and feeding. Much attention is given to the judging of animals for the selection of profitable types. All students in Animal Husbandry receive a course in Veterinary Science which treats of the common diseases and methods of treatment of the domestic animals. The investigations conducted by the Missouri Experiment Station have been of incalculable benefit to the farmers of the State. The experiments in cattle feeding have attracted wide attention and have had much to do with fixing many of the profitable feeding methods in the State.

Investigation of incalculable benefit.



JERSEY CALF—L. E. SHATTUCK, STANBERRY.

The discovery of Dr. J. W. Conaway, of this Station, that by a simple method of inoculation, cattle could be made immune to the Texas or splenic fever, has opened up a large and profitable market for Missouri cattle. The Live Stock Laboratory, located on the College Farm is a stone building devoted to instruction in Veterinary Science and investigations in Animal Breeding. It contains also a large and well-lighted judging pavilion in which the stock judging exercises are conducted.

The records of the American Saddle Horse Association show that there are 3,028 saddle horses recorded in the United States. Of this number 686 are reg-

Saddle horses.

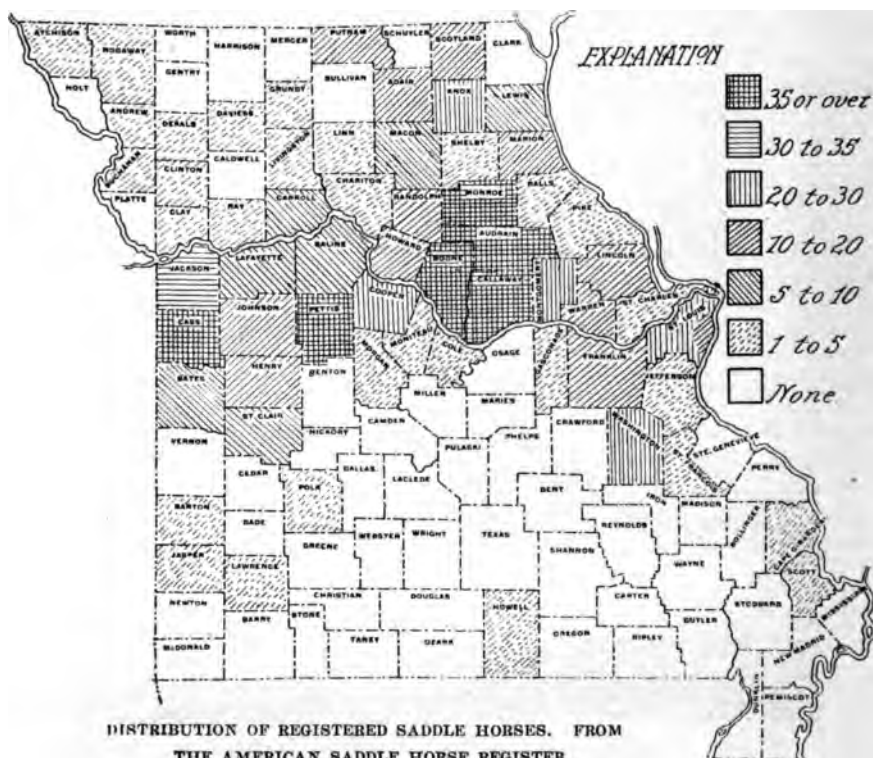


ANGORA GOATS—ELMER FRAZER, MARYVILLE.



CATTLE, LIVINGSTON COUNTY.

istered from Missouri. This is 23 per cent of all the registered saddle horses in America. Exclusive of Kentucky, Missouri has more registered saddle horses than all the other States combined. Of the original foundation of the American





PRIZE HEREFORDS—O. HARRIS, SULLIVAN COUNTY.

saddle horse breed, Missouri furnished some of the most important sires. Two Missouri horses, especially, appear frequently in the pedigrees of the best saddle horses. These are Vernon's Roebuck and Pat Cleburne. From these two noted animals, and a large number of lesser fame, have sprung the Missouri saddle horses.

Saddle horse records

An event of unusual importance to the saddle horse breeding industry in Missouri happened in 1886 when L. D. Morris, Clark Potts, R. W. Edmondson, Jack Harrison, and G. Tom King brought four great saddle stallions from Kentucky. These animals, Black Squirrel, Moss Rose, Artist Montrose, and Mark Diamond, have left an ineffaceable impress upon the saddle horse stock of the State. These great sires have given Missouri an enviable reputation for high class saddle animals throughout the United States. Another horse whose value it is impossible to measure, was Old Montrose, who was used in the State for breeding purposes from 1880 to 1893, inclusive.

Event of unusual importance.

Some of the men who have sold animals of high merit at large prices are Jeff Bridgeford, H. T. McElroy, T. H. Jones, Dr. S. Maddox, George Nicholson, and John Harrison. One of the most successful breeders of saddle horses in the State is John Harrison, of Auxvasse. He has sold 800 saddle horses—an average of forty a year. Some of the great horses that he has sold were Rex Denmark, \$1,665; Montrose, \$1,450; Red Rose, \$1,250; Star Rose, \$1,100, and Chimes, \$1,125. In his twenty years' experience as an exhibitor of saddle horses, he has won 1,600 prizes and \$20,000 in prize money. In the year 1890 he won 250 first prizes and \$5,300 in prize money. It is believed that this breeder, during the years of 1886 to 1893, had the largest herd of brood mares of the American Saddle Horse breed of any breeder in the world.

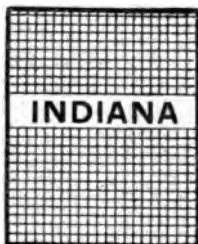
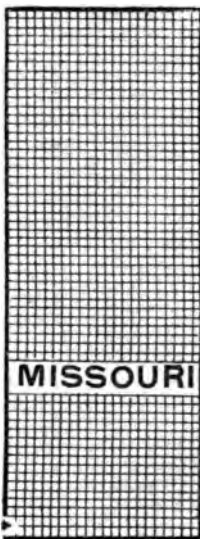
Breeders of saddle horses.

Another gentleman whose successful career as a saddle horse breeder has perhaps been unexcelled in any State or country is that of Jeff Bridgeford. This gentleman has sold 250 head of saddle horses for \$100,000.

George Nicholson, of Fulton, has been a breeder of saddle horses for twenty-five years. Two horses, La Rose and King La Rose, owned by this gentleman, sold for \$1,500 and \$1,250, respectively. La Rose took first and

Successful for years.

King La Rose took second at the World's Fair in Chicago for three-year-old saddle horses. One



NUMBER OF HEREFORD CATTLE EXHIBITED BY FIVE LEADING STATES AT ALL INTERNATIONAL SHOWS.



CATTLE FROM THE MISSOURI AGRICULTURAL COLLEGE FARM.

of his mares has produced thirteen colts, valued at \$4,000. This mare is still (1904) alive.

Another successful breeder is Dr. S. Maddox, of Ely. A very successful handler of horses, especially saddle horses, is Ben R. Middleton, of Mexico, a picture of whose horses accompany this article.

ld's Fair prizes.

At the World's Fair in Chicago there were 37 saddle horses entered for competition. Fourteen of these were from Missouri, fifteen from Kentucky, and eight from all other States. Of the five herds entered, two were from Missouri. The saddle horse breeders who won important prizes in this event were J. A. Potts, who won first on stallion four-years-old and under five; E. L. Parrish, of St. Louis, first on three-year-old stallion; T. S. Harrison, of Auxvasse, first on three-year-old mare; and A. F. Wychoff, of Appleton City, first and sweepstakes on stallion, any age. Besides this, a large number of second and smaller prizes were awarded to Missouri breeders. The special premium for gentleman displaying the best horsemanship in the saddle was awarded to Jeff Bridgeford, of Paris, Missouri. Summing up all the prizes taken by Missouri at the Chicago World's Fair, we find that she won three firsts, one first and sweepstakes and seven seconds, a total of eleven first and second prizes. Kentucky at the same



CATTLE FEEDING—W. E. MUIR, CALLAWAY COUNTY.



COOPER COUNTY CATTLE SCENE.

*Photograph by Max Schmidt, Boonville.*

fair won four firsts and two seconds, a total of six first and second prizes. At the St. Louis Fair, which has always been a Mecca for the saddle horse exhibitors of the south and west, Missouri won first and sweepstakes prizes, 12 out



NUMBER OF FIRST AND CHAMPION PRIZES WON BY MISSOURI HEREFORDS AT ALL INTERNATIONAL SHOWS IN COMPETITION WITH THE WORLD.

of 14 times. Some of the horses that helped to win these honors for Missouri were Mark Diamond, Old Montrose, Moss Rose, Rex Diamond, Miss Rex, and Rex McDonald. Rex McDonald is one of the greatest living saddle horses. He was bred by Joseph McDonald, of Mexico, Missouri. His sire was Rex Denmark. He has won first and sweepstakes every year shown at St. Louis from 1894 to 1903.

Some of the great horses.

Other breeders of saddle horses are, A. B. Hughes, W. E. Cone, Hanson J. Marks, R. P. Moore, W. E. Cheatham, C. F. Clark, G. Tom King, L. M. Monsees & Son, A. F. Wykoff, D. P. Ewing, S. W. Roberts, Moss A. Robertson, E. S. Stewart, A. F. Styles, Thomas Bass, J. A. Potts.

Missouri has long enjoyed an enviable reputation as an important source of light horses. Many of the substantial citizens of the State were pioneers from the blue grass regions of Kentucky. These early settlers brought with them the Kentuckian's love for good horses and his skill in breeding fine stock. Thus we find nowhere else better specimens of the American saddle horse, the standard-bred horse, and the thoroughbred, than in Missouri. Two of the four purchasing stations for government horses are in Missouri, one at St. Louis and one at Kansas City. The hard dense bone which is necessary for the successful trials of speed is characteristic of the horses pastured on the limestone soils of Missouri. There are some very large breeders of standard-bred horses in the State who have been unusually successful. One of the oldest and most distinguished of these is Col. Ryland Todhunter, of Greystone Park, Lexington, Missouri.

Roadster horses.



HOLSTEINS, FIRST PRIZE, STATE FAIR.—M. E. MOORE, CAMERON, MISSOURI.

This gentleman has been breeding standard-bred horses for fifty years and has sold in that time animals to the value of more than \$100,000. Some of the famous horses sold by this breeder are Star Wilkes, \$6,000; Idol, \$5,000; Lady Thorn \$5,000; Merchant, \$2,500, and Ashland Chief, \$2,500. This breeder's famous stallion, Star Wilkes, in one year produced colts valued at \$33,000. At the Kansas City Fair in 1877, horses from this farm won first premium on stallion over all ages and breeds, first premium for best mare and first premium for best weanling colt.

Another farm that has produced good trotting horses for twenty years is Spring Lawn Farm, owned by E. J. Shelpman. This farm has sold 95 registered horses for \$28,500. Two horses bred on this farm, Trumpeter and Gilbert's Sprague, sold for \$1,200 and \$1,050, respectively. This establishment has won \$12,500 in premiums at the various State and local fairs. It is estimated that the best stallion owned by this farm produced 500 colts which, at a conservative estimate, are valued at \$125,000.

Another Missouri breeder of note is B. F. Swaggard, of Sweet Springs, Missouri. This gentleman has had eighteen years' experience and has sold trotting horses to the value of \$40,000. Some of his best sales were Dillon Boy, \$10,000; Andrew Allison, \$3,300; Lady Glenn, \$2,000, Maud, \$1,500, and Mambrino Bee, \$1,500. The trotting record for Missouri stallions is held by Dillon Boy, 2:09 1-4. This horse was bred and owned by Mr. Swaggard.

Other good breeders of standard-bred horses are John Burruss, Henry T. McElroy, S. M. Finley, W. H. Stephenson, E. T. Letton & Son, H. D. Renter, G. E. Chinn, N. J. Coleman, J. R. Gentry, E. Knell, R. L. McDonald, J. F. Robinson, J. D. Shewalter, H. D. Ayers, D. L. Bourn, G. M. Catron, and D. A. Colyer.

The mule is an indispensable draft animal in southern agriculture. The draft breeds of horses are as naught compared with him for continuous labor in the cotton and the corn. No modern war can be successfully carried forward without the mule. Large-sized, well-proportioned and strongly-built mules are characteristic of Missouri. For this reason, when the British army sent its agents to the Western continent to buy mules, they established their distributing center at Lathrop, Missouri, and from this point were sent out 115,000 mules. These mules, after serving with dis-

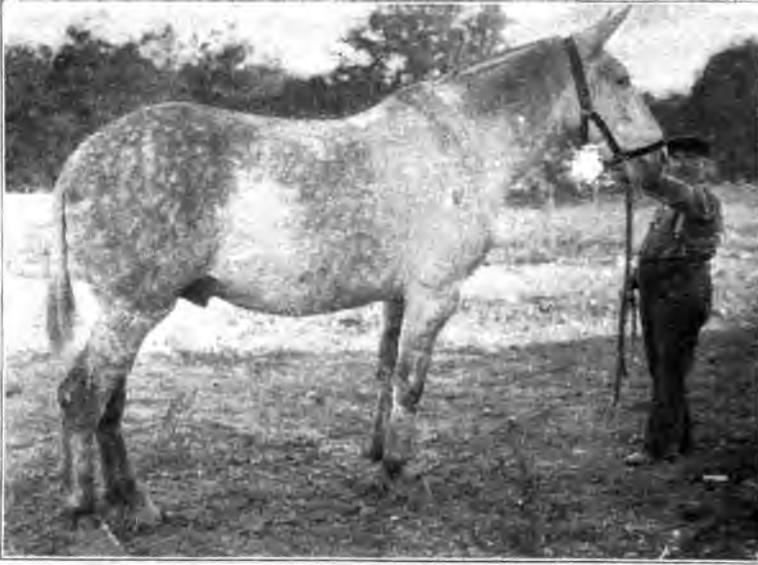


DR. COX, OWNED BY J. C. CLARK, BUTLER.

standard-bred  
horses.

and trotters.

: Missouri Mule.



MULE, VALLEY VIEW JACK FARM; 8 YEARS OLD, 19 HANDS HIGH, 1,900 POUNDS.

tinction throughout the Boer war, are now one of the most important factors in developing the agriculture of that region. At the beginning of the war in the far East between Russia and Japan, a large consignment of mules was purchased in Missouri for the Russian army. In the production of good mules the Missouri farmers have found out that large-sized and well-formed parents must be selected. The diminutive mules so often seen in certain parts of the south are not a profitable sort to produce. The high quality maintained in Missouri mules is due to the extreme care exercised by the breeders of this class of animals. The average Missouri mule breeder is as careful in the selection of his mares for the production of mules as for any other class of horses.

Guyton & Harrington, Lathrop, maintained the largest horse-distributing barn in the world during the Boer war. During this war the company furnished 115,000 Missouri mules and 65,000 horses to the British Government.

The census for 1900 gives the number of swine in Missouri at 4,524,664. Secretary George B. Ellis, of the Board of Agriculture, values these at \$45,216,760. Only two classes of animals, cattle and horses, have a higher total valuation than have domestic swine. The domestic hog is a staple product of the western farm.

Missouri furnishes  
mules for South  
Africa.

Missouri swine.



THE GUARDIAN OF THE FLOCK.  
breeds—the Poland-China, Berkshire, and Duroc-Jersey. There are probably more representatives of the Poland-China breed than all of the others combined.

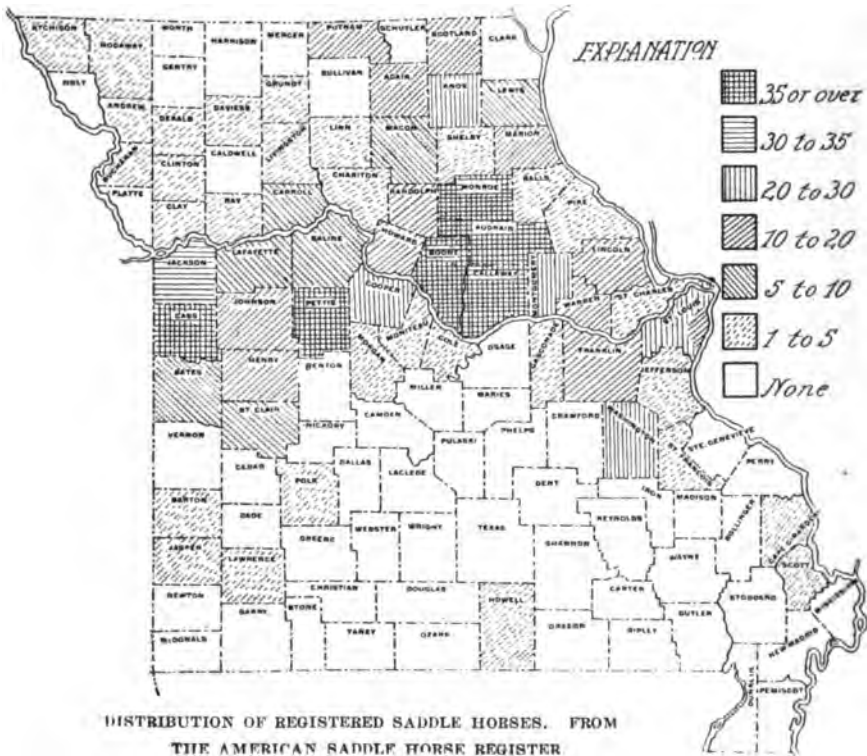
Its ability to grow rapidly and economically have made it one of the most profitable animals for the small and large farmer alike. The ordinary pig will produce from ten to fourteen pounds of pork for every bushel of corn fed. He will gain so rapidly that he can be sold at the maximum price at six months of age. Thus, money invested in hogs is rapidly returned. While every important breed of hog is represented within the borders of the State, the great majority of hogs belong to one of the three great





CATTLE, LIVINGSTON COUNTY.

istered from Missouri. This is 23 per cent of all the registered saddle horses in America. Exclusive of Kentucky, Missouri has more registered saddle horses than all the other States combined. Of the original foundation of the American





PRIZE HEREFORDS—O. HARRIS, SULLIVAN COUNTY.

saddle horse breed, Missouri furnished some of the most important sires. Two Missouri horses, especially, appear frequently in the pedigrees of the best saddle horses. These are Vernon's Roebuck and Pat Cleburne. From these two noted animals, and a large number of lesser fame, have sprung the Missouri saddle horses.

Saddle horse records

An event of unusual importance to the saddle horse breeding industry in Missouri happened in 1886 when L. D. Morris, Clark Potts, R. W. Edmondson, Jack Harrison, and G. Tom King brought four great saddle stallions from Kentucky. These animals, Black Squirrel, Moss Rose, Artist Montrose, and Mark Diamond, have left an ineffaceable impress upon the saddle horse stock of the State. These great sires have given Missouri an enviable reputation for high class saddle animals throughout the United States. Another horse whose value it is impossible to measure, was Old Montrose, who was used in the State for breeding purposes from 1880 to 1893, inclusive.

Event of unusual importance.

Some of the men who have sold animals of high merit at large prices are Jeff Bridgeford, H. T. McElroy, T. H. Jones, Dr. S. Maddox, George Nicholson, and John Harrison. One of the most successful breeders of saddle horses in the State is John Harrison, of Auxvasse. He has sold 800 saddle horses—an average of forty a year. Some of the great horses that he has sold were Rex Denmark, \$1,665; Montrose, \$1,450; Red Rose, \$1,250; Star Rose, \$1,100, and Chimes, \$1,125. In his twenty years' experience as an exhibitor of saddle horses, he has won 1,600 prizes and \$20,000 in prize money. In the year 1890 he won 250 first prizes and \$5,300 in prize money. It is believed that this breeder, during the years of 1886 to 1893, had the largest herd of brood mares of the American Saddle Horse breed of any breeder in the world.

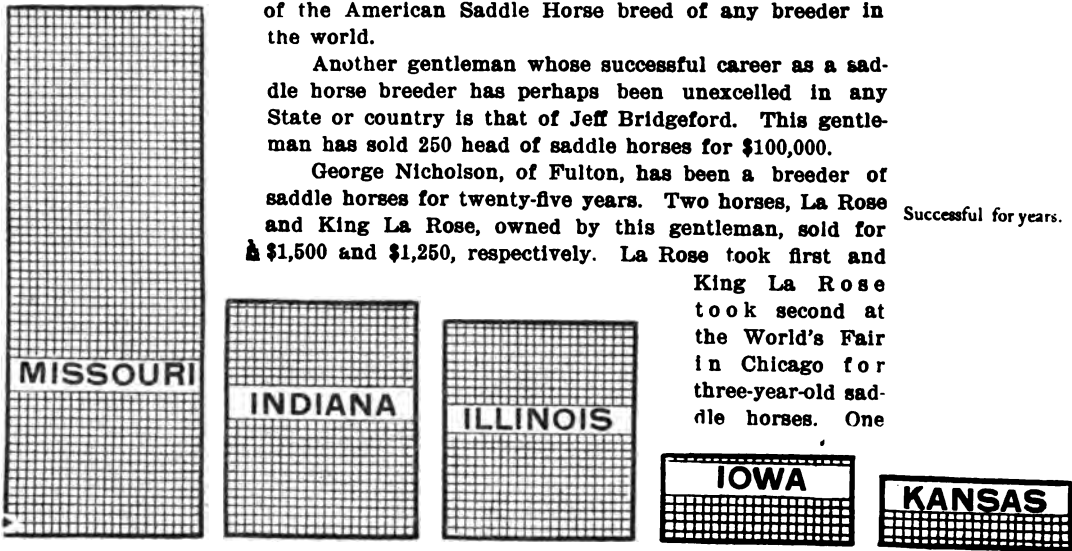
Breeders of saddle horses.

Another gentleman whose successful career as a saddle horse breeder has perhaps been unexcelled in any State or country is that of Jeff Bridgeford. This gentleman has sold 250 head of saddle horses for \$100,000.

George Nicholson, of Fulton, has been a breeder of saddle horses for twenty-five years. Two horses, La Rose and King La Rose, owned by this gentleman, sold for \$1,500 and \$1,250, respectively. La Rose took first and

Successful for years.

King La Rose took second at the World's Fair in Chicago for three-year-old saddle horses. One



NUMBER OF HEREFORD CATTLE EXHIBITED BY FIVE LEADING STATES AT ALL INTERNATIONAL SHOWS.



CATTLE FROM THE MISSOURI AGRICULTURAL COLLEGE FARM.

of his mares has produced thirteen colts, valued at \$4,000. This mare is still (1904) alive.

Another successful breeder is Dr. S. Maddox, of Ely. A very successful handler of horses, especially saddle horses, is Ben R. Middleton, of Mexico, a picture of whose horses accompany this article.

World's Fair prizes.

At the World's Fair in Chicago there were 37 saddle horses entered for competition. Fourteen of these were from Missouri, fifteen from Kentucky, and eight from all other States. Of the five herds entered, two were from Missouri. The saddle horse breeders who won important prizes in this event were J. A. Potts, who won first on stallion four-years-old and under five; E. L. Parrish, of St. Louis, first on three-year-old stallion; T. S. Harrison, of Auxvasse, first on three-year-old mare; and A. F. Wychoff, of Appleton City, first and sweepstakes on stallion, any age. Besides this, a large number of second and smaller prizes were awarded to Missouri breeders. The special premium for gentleman displaying the best horsemanship in the saddle was awarded to Jeff Bridgeford, of Paris, Missouri. Summing up all the prizes taken by Missouri at the Chicago World's Fair, we find that she won three firsts, one first and sweepstakes and seven seconds, a total of eleven first and second prizes. Kentucky at the same



CATTLE FEEDING—W. E. MUIR, CALLAWAY COUNTY.



COOPER COUNTY CATTLE SCENE.

*Photograph by Max Schmidt, Boonville.*

fair won four firsts and two seconds, a total of six first and second prizes. At the St. Louis Fair, which has always been a Mecca for the saddle horse exhibitors of the south and west, Missouri won first and sweepstakes prizes, 12 out



NUMBER OF FIRST AND CHAMPION PRIZES WON BY MISSOURI HEREFORDS AT ALL INTERNATIONAL SHOWS IN COMPETITION WITH THE WORLD.

of 14 times. Some of the horses that helped to win these honors for Missouri were Mark Diamond, Old Montrose, Moss Rose, Rex Diamond, Miss Rex, and Rex McDonald. Rex McDonald is one of the greatest living saddle horses. He was bred by Joseph McDonald, of Mexico, Missouri. His sire was Rex Denmark. He has won first and sweepstakes every year shown at St. Louis from 1894 to 1903.

Some of the great horses.

Other breeders of saddle horses are, A. B. Hughes, W. E. Cone, Hanson J. Marks, R. P. Moore, W. E. Cheatham, C. F. Clark, G. Tom King, L. M. Monsees & Son, A. F. Wykoff, D. P. Ewing, S. W. Roberts, Moss A. Robertson, E. S. Stewart, A. F. Styles, Thomas Bass, J. A. Potts.

Missouri has long enjoyed an enviable reputation as an important source of light horses. Many of the substantial citizens of the State were pioneers from the blue grass regions of Kentucky. These early settlers brought with them the Kentuckian's love for good horses and his skill in breeding fine stock. Thus we find nowhere else better specimens of the American saddle horse, the standard-bred horse, and the thoroughbred, than in Missouri. Two of the four purchasing stations for government horses are in Missouri, one at St. Louis and one at Kansas City. The hard dense bone which is necessary for the successful trials of speed is characteristic of the horses pastured on the limestone soils of Missouri. There are some very large breeders of standard-bred horses in the State who have been unusually successful. One of the oldest and most distinguished of these is Col. Ryland Todhunter, of Greystone Park, Lexington, Missouri.

Roadster horses.



HOLSTEINS, FIRST PRIZE, STATE FAIR.—M. E. MOORE, CAMERON, MISSOURI.

Standard-bred  
horses.

This gentleman has been breeding standard-bred horses for fifty years and has sold in that time animals to the value of more than \$100,000. Some of the famous horses sold by this breeder are Star Wilkes, \$6,000; Idol, \$5,000; Lady Thorn \$5,000; Merchant, \$2,500, and Ashland Chief, \$2,500. This breeder's famous stallion, Star Wilkes, in one year produced colts valued at \$33,000. At the Kansas City Fair in 1877, horses from this farm won first premium on stallion over all ages and breeds, first premium for best mare and first premium for best weanling colt.

Good trotters.

Another farm that has produced good trotting horses for twenty years is Spring Lawn Farm, owned by E. J. Shelpman. This farm has sold 95 registered horses for \$28,500. Two horses bred on this farm, Trumpeter and Gilbert's Sprague, sold for \$1,200 and \$1,050, respectively. This establishment has won \$12,500 in premiums at the various State and local fairs. It is estimated that the best stallion owned by this farm produced 500 colts which, at a conservative estimate, are valued at \$125,000.

Another Missouri breeder of note is B. F. Swaggard, of Sweet Springs, Missouri. This gentleman has had eighteen years' experience and has sold trotting horses to the value of \$40,000. Some of his best sales were Dillon Boy, \$10,000; Andrew Allison, \$3,300; Lady Glenn, \$2,000, Maud, \$1,500, and Mambrino Bee, \$1,500. The trotting record for Missouri stallions is held by Dillon Boy, 2:09 1-4. This horse was bred and owned by Mr. Swaggard.



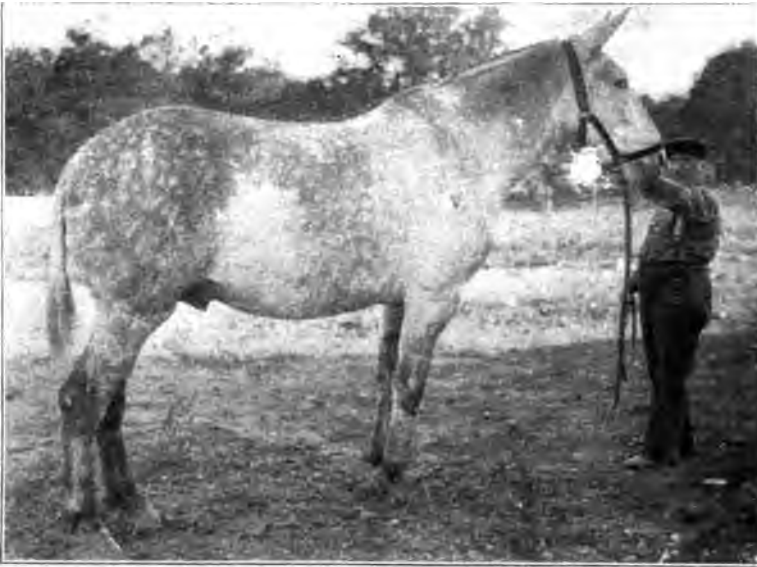
DR. COX, OWNED BY J. C. CLARK, BUTLER.

Other good breeders of standard-bred horses are John Burruss, Henry T. McElroy, S. M. Finley, W. H. Stephenson, E. T. Letton & Son, H. D. Renter, G. E. Chinn, N. J. Coleman, J. R. Gentry, E. Knell, R. L. McDonald, J. F. Robinson, J. D. Shewalter, H. D. Ayers, D. L. Bourn, G. M. Catron, and D. A. Colyer.

The mule is an indispensable draft animal in southern agriculture. The draft breeds of horses are as naught compared with him for continuous labor in the cotton and the corn. No modern war can be successfully carried forward without the mule. Large-sized, well-proportioned and strongly-built mules are characteristic of Missouri. For this reason,

when the British army sent its agents to the Western continent to buy mules, they established their distributing center at Lathrop, Missouri, and from this point were sent out 115,000 mules. These mules, after serving with dis-

The Missouri Mule.



MULE, VALLEY VIEW JACK FARM; 8 YEARS OLD. 19 HANDS HIGH, 1,900 POUNDS.

tion throughout the Boer war, are now one of the most important factors in developing the agriculture of that region. At the beginning of the war in the far East between Russia and Japan, a large consignment of mules was purchased in Missouri for the Russian army. In the production of good mules the Missouri farmers have found out that large-sized and well-formed parents must be selected. The diminutive mules so often seen in certain parts of the south are not a profitable sort to produce. The high quality maintained in Missouri mules is due to the extreme care exercised by the breeders of this class of animals. The average Missouri mule breeder is as careful in the selection of his mares for the production of mules as for any other class of horses.

Guyton & Harrington, Lathrop, maintained the largest horse-distributing barn in the world during the Boer war. During this war the company furnished 115,000 Missouri mules and 65,000 horses to the British Government.

The census for 1900 gives the number of swine in Missouri at 4,524,664. Secretary George B. Ellis, of the Board of Agriculture, values these at \$45,216,760. Only two classes of animals, cattle and horses, have a higher total valuation than have domestic swine. The domestic hog is a staple product of the western farm.

Its ability to grow rapidly and economically have made it one of the most profitable animals for the small and large farmer alike. The ordinary pig will produce from ten to fourteen pounds of pork for every bushel of corn fed. He will gain so rapidly that he can be sold at the maximum price at six months of age. Thus, money invested in hogs is rapidly returned. While every important breed of hog is represented within the borders of the State, the great majority of hogs belong to one of the three great

breeds—the Poland-China, Berkshire, and Duroc-Jersey. There are probably more representatives of the Poland-China breed than all of the others combined.



THE GUARDIAN OF THE FLOCK.

Missouri furnishes mules for South Africa.

Missouri swine.

This early-maturing breed has been in high favor for a very long period. They are distinctly a product of the corn belt of America.

Poland-China swine



One of the most successful breeders in the State is F. M. Lail, of Marshall. This gentleman has been engaged in breeding Poland-China hogs 23 years, producing in that time more than 2,000 hogs. The total sum received for these animals is \$40,000. One sow, Sally S., owned by this breeder has farrowed 100 pigs and these have been sold for \$4,000. Five hogs sold by Mr. Lail brought \$4,645.

Another well-known breeder of Poland-Chinas who has had over 20 years' experience, is E. E. Axline, of Oak Grove. This herd has

produced over 4,000 animals which have sold for over \$75,000. Four animals sold by this breeder brought \$2,475.

Another breeder who has been in the business ten years is J. W. Breedlove, of LaBelle. This gentleman has produced 400 hogs which have sold for \$8,000.

Breeders of fine hogs.

J. R. Young, of Richards, Missouri, has produced 350 hogs in seven years which have brought him \$22,000. Five of his best hogs sold for \$5,135.

Other successful breeders of Poland-China swine in Missouri are, T. W. Herbst, A. T. Grimes, E. W. Wallen, E. C. Branch, Sensintaffer Brothers, C. A. Griesenauer, Samuel Taylor, I. A. Novinger, E. E. Faires, E. H. Rodgers, W. B. Windsor, E. A. Hofstatler, D. D. Updike, R. W. Taylor, Burks & Brothers, Walter J. Sims, D. W. B. Kurtz, C. W. Stewart, T. G. Phelps, D. F. Risk, L. W. Monsees & Sons, Nelson Cole and J. E. Summers.

Berkshire swine.

The famous blue-grass pastures of Missouri have created a demand for a grazing hog. Breeders of Berkshires claim that their favorites are the most successful grazing animals among all the breeds of domestic swine. Certain it is that wherever they have been tried they have given great satisfaction to their owners. Missouri enjoys the distinction of having one of the most famous Berkshire breeders in America. N. H. Gentry, of Sedalia, has successfully shown at the greatest fairs in the world and has perhaps sold more high-priced Berkshire hogs than any contemporary breeder. At the



Columbian Exposition Mr. Gentry won ten of the eighteen first prizes offered. Two other first prizes were won by a boar of Mr. Gentry's breeding, and five other firsts were won by this distinguished breeder. At the World's Fair at New



JERSEYS—ROLLO OLIVER, DEARBORN.

Orleans, Louisiana, in 1885, the Gentry Berkshires won all the first prizes offered on Berkshires, and also a \$250 gold medal for the best herd of any age or breed. In 1903, 102 Berkshires were sold from this herd for \$9,915. Stock from this herd has been used in nearly every Berkshire

Has won the first prizes.

herd of prominence in the United States and Canada. Shipments at different times have been made to foreign countries, including British West Indies, Cuba, and South America. It is generally conceded that Mr. Gentry has better bred Berkshires than have ever been imported from the old country. The Breeders' Gazette some years ago said that the history of the breed afforded no parallel to the success accomplished by this breeder in the improvement of the Berkshire breed. Lord Premier, for which \$1,500 has been refused, is the greatest Berkshire boar living. He, his sire, his grandsire (the great Longfellow) were all bred at Wood Dale, the Gentry farm.

Other good breeders of Berkshires are Harris & McMahan, June K. King, John Morris, Evon Davies, E. C. Larch, James Price, Joseph Quesollo, F. A. Scott, William Brisky, and J. H. Riley.

No breed of hogs has increased so rapidly in favor among Missouri stockmen as the Duroc-Jersey. This breed is prized particularly because of its great hardiness and prolificacy. Ten years ago the Duroc-Jersey was rarely found in the State. To-day there are more than 100 breeders, thus ranking next to Poland-Chinas in numbers in the State.

S. Y. Thornton has been breeding Duroc-Jerseys for nine years. In that time 602 animals have been sold for \$13,000. During the three years 412 head have sold for \$9,312.

The picture accompanying this article shows four of Mr. Thornton's sows which together produced sixty-five pigs.

J. D. Stephenson has sold \$10,000 worth of Duroc-Jerseys in nine years.

Other men who breed Duroc-Jerseys are W. L. Addy, J. D. Stevenson, Harry Sneed, E. McFarland Bros., W. A. Mustain, C. Folgate, T. F. Johnston, A. F.



SADDLE HORSE—B. E. MIDDLETON, MEXICO.

Duroc-Jersey swine.





SHORTHORNS—SANFORD SMITH, CARTHAGE.

Russell, J. C. Woodburn, D. L. Zumbro, S. G. Richards, Joseph Gibson and J. L. Condron.

Sheep.

The business of breeding and feeding sheep is rapidly growing in this State. At the present time Missouri has a larger number of sheep than any adjoining State except Kentucky. Some of the most famous breeders of Merino sheep in America are located in Missouri. At the Columbian Exposition, L. E. Shattuck, of Stanberry, took more first prizes than any other breeder. The Shattuck flock is now owned and successfully bred by E. B. Wilson, of Stanberry. The Bothwells, of Breckenridge, have been remarkably successful in the production of high-class Rambouillet sheep. Shropshire sheep are bred by S. F. Huntsman, of Cairo; W. L. Smithy, Strother; Joseph Miller, of Granger; J. W. Boles, of Auxvasse; A. A. Alexander, Houstonia; I. H. Blood, Peru; E. C. Crouch, Blue Springs; L. N. Callison, Jamesport; H. Nance, Civil Bend; F. P. Paradise, Brookfield; M. P. DeWitt, Reger; E. W. Garrett, Sutherland; Grimes & Wilson, Monroe City; and H. C. Taylor, of Coping. Approximately 200 men in this State own registered Shropshire rams. Cotswold sheep have been successfully handled for twenty years by Hopson Glasscock, of Oakwood. W. E. McFarland breeds Rambouillet sheep at Paris.

Climate, soil and water adapt Missouri to sheep raising.

The climate, soil and good water render Missouri particularly adapted for the production of high-class sheep and, with the present rapidly increasing numbers, it will be but a short time when Missouri will rank with the best sheep States in the Union. There are large areas of land in south Missouri that can be successfully used for the production of sheep.

Much interest has been shown in the past two years in the breeding of goats. There are now in the State more than 31,000 head. These goats have been used on land where other live stock could not subsist. In many cases they have been successfully employed for the destruction of brush and weeds on pastures otherwise worthless.



ROSE HULL HERD OF DUBOC-JERSEY SWINE—  
S. Y. THORNTON, BLACKWATER.

The State's well-deserved fame.

Missouri has won fame for her flocks and herds. Her people are by nature and training lovers of good stock. The State is located admirably for live stock growing. No other state surpasses it now and the splendid showing of its pure-bred animals points to its continued pre-eminence.

# HORTICULTURE



**M**ISSOURI leads all the United States in horticulture. During the last fifteen years there has been an increase of 300 per cent in the number of apple trees in Missouri. The State now has 25,000,000 apple trees, a third more than any other State in the federal union. The Missouri apple has international renown.

In peaches as in apples Missouri is first. The greatest acreage of peach orchards of any State is possessed by Missouri. A full crop yields \$4,500,000.

The center of the strawberry region is in Missouri. Two thousand car loads of strawberries are shipped annually from the State. In a single year the berry crop aggregates \$3,500,000.

The largest orchard in the world is in Missouri. The largest nurseries in the world are in Missouri. No other State has so large a fruit acreage. Twenty million dollars is the value of the State's fruit crop.

The best fruit land in the world, the loess formation, is in Missouri. The red lands of the Ozarks, ideal subsoil, are scarcely second in value.

The fruit lands are inexhaustible. There is an apple tree in Missouri 90 years old, 10 1-2 feet in circumference. There is a peach tree in Missouri 54 years old, 7 1-2 feet in circumference. There is a grape vine in Missouri 120 years old, 2 1-2 feet in circumference. All are bearing fruit.

The largest variety of wild crab apple in the world is in Missouri, 9 inches in circumference. Missouri has raised apples weighing 30



Provision for the teaching of horticulture has kept pace with the growth of the fruit industry. The Missouri State Horticultural Society is the largest



FARM AND ORCHARD, GASCONADE COUNTY.

and best in America. Local societies are numerous and flourishing. The Missouri Botanical Garden in St. Louis, founded by Henry Shaw, is of world-wide fame. The department of horticulture in the Missouri Agricultural College is of

Greatest acreage of peach trees of any State.



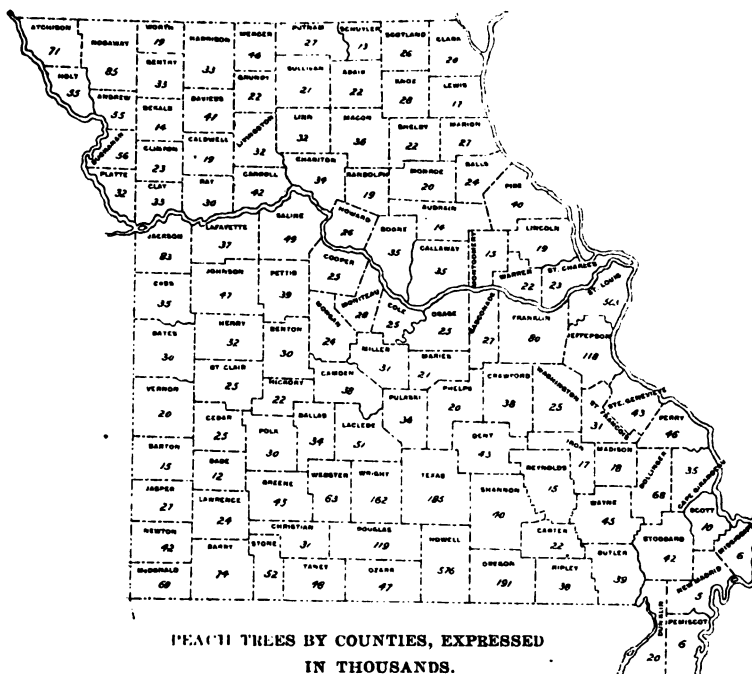
MISSOURI  
BOTANICAL GARDEN  
(SHAW'S  
GARDEN),  
ST. LOUIS.



THE STATE OF MISSOURI.

**Center of the  
strawberry region  
of the world.**

**Best fruit land on earth.**



**Originates many varieties of fruit.**

the highest excellence while at Mountain Grove is maintained by the State the only exclusive Fruit Experiment Station in the federal union. Thirty thousand fruit growers are to be found in Missouri and fruit is profitably produced in every county in the commonwealth.

The natural resources of Missouri favor great horticultural development, undulating surface, variety of soil formation, medium climate, well distributed rainfall and central geographical location all contribute toward unsurpassed horticultural advantages.

The Mississippi River on the east and the Missouri which intersects the State from the northwest to its east central border, together with their tributaries afford unexcelled facilities for both water drainage and atmospheric drainage. Horticultural products thrive only upon soils which have good water drainage, so they will work easily in spring and in which the plants may root deeply. Atmospheric drainage is of equal importance, so the cool, heavy atmosphere may drain off at night.



leaving the plants free from danger of frosts.

From the Missouri river northward the land is of glacial formation, being rich clay loam, which is for the most part sufficiently undulating to be adapted

to a great variety of crops. In the southern half of the State the Ozark uplift presents an immense area, nearly all of which is adapted to fruit growing.

Along the two great rivers are fringes of the loess soil, a silt-like deposit, which lies in a strip from one to twenty miles wide. This latter formation is the finest fruit soil in the world. While usually of broken and forbidding surface, it is exceedingly fertile, remarkably homogeneous to a great depth, perfectly



APPLES READY FOR COLD STORAGE, LACLEDE COUNTY.

drained and adapted to the growth of all kinds of horticultural plants. In it the forest trees often root to a depth of twenty to thirty feet. Orchard trees

partake of this same habit of growth and are remarkably productive in this soil. In the southeast there is an extensive alluvial deposit which, where well drained, produces immense crops of small fruits and vegetables.

The moderate climate of the State favors the growth of a great diversity of horticultural products. The native flora embraces both northern and southern plants as

Forty dollars an acre from one orchard annually for twenty years.



ON A FRUIT FARM, WEBSTER COUNTY.

well as both eastern and western species. In this central position, with a large variety of soil, the State combines conditions that favor the natural growth of plant families of other sections of the country. Here the wild flora of the different sections seems to blend together and overlap. The native wild crab and June berry, capable of enduring the rigors of a northern winter, flourish here in the same woods with the more southern pawpaw and persimmon. Among grapes, the northern, southern, eastern and western species and their cultivated varieties thrive. Missouri vineyards are planted to the various varieties that have sprung from the native species of other sections as well as from those that are indigenous to the central west. The Soulard crab, the most promising native American apple (which is possibly a hybrid between our native wild crab and the apple introduced from Europe) was brought to horticultural

Horticulture taught by the State.



ON THE MISSOURI HORTICULTURAL GROUNDS, COLUMBIA.

Natural resources  
favor great  
horticultural  
development.

notice in Missouri. Among our native plums, the northern American species and the southern Chickasaw plums blend together in our woods and cultivated representatives of both species are of importance in the Missouri orchards. The sand plum and the sand cherry, both natives to the semi-arid section of the west, also thrive with luxuriance in this State. The wide range of adaptation of Missouri soil and climate to varied groups of native plants is of horticultural significance, not so much on account of the economic value of some of these native species, but because it proves that the State is adapted to the growth of a great variety of horticultural products.



PACKING PEACHES, WRIGHT COUNTY.

Excellent drainage  
everywhere.

Rainfall is sufficient and well distributed for the best orcharding. The average, approximately forty inches, is abundant and the distribution throughout the growing season is unusually favorable. The months of April, May,

June and July show the most abundant rainfall, an average of five inches for each of these four months. This is the season of the most abundant wood and leaf growth of fruit trees and consequently the time when they require the greatest amount of water. The months of August, September and October show a decrease in the amount of the rainfall which is favorable to the ripening and maturing of the wood of the trees so as to ena-

Formation of the  
land conduces to  
fruit culture.



PEACH ORCHARD, OZARK COUNTY.

ble them to withstand the coming winter. While the rainfall is ample and well distributed the percentage of sunny days is high. During August, September and October especially, when most of the fruit is maturing, the average amount of bright sunlight is considerably higher than in other fruit States. The intense sunlight and the proximity to airy prairies are important factors of Missouri fruit growing and may also account in part at least, for the comparative freedom from many of the fungous diseases which are known to thrive best in a moist, cloudy atmosphere.



CLEARING FOR PLANTING IN THE OZARKS.

Loess soil unequalled in the world.

Moderate climate favors growth of great diversity of fruit.

Missouri's central position is favorable to the marketing of her horticultural products. Perishable fruits like berries and peaches are sent to almost all of the principal markets east of the Rocky Mountains while the Missouri apple is



capable of reaching practically all the great markets of the world. This ability to ship in all directions is of especial advantage in disposing of perishable products. It not only gives easy access to a larger number of markets but it

Fruits from north and south flourish.



BOX OF MISSOURI STRAWBERRIES.

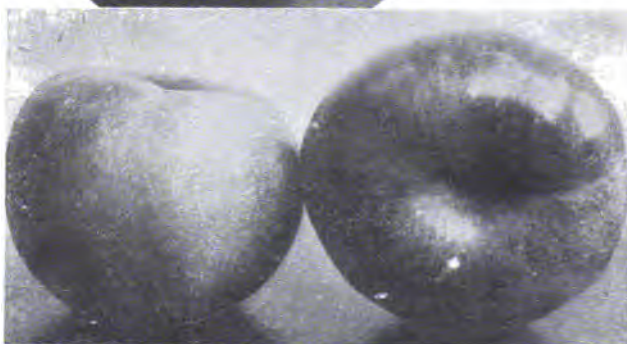
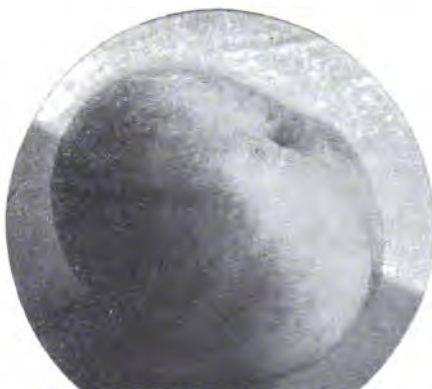
affords opportunity for a choice of market, providing there is an over supply in any section. Perishable fruits go west to Denver, Omaha and Sioux City; north to Minneapolis, St. Paul and Detroit; east to Buffalo, New York, Philadelphia and Baltimore; and south to Birmingham, Mobile, New Orleans and Galveston, as well as to all intervening cities of importance. The strawberry, for example, is first sent north, east or west, depending upon

Rainfall sufficient and well distributed.

the best demand, and toward the close of the season it is shipped south, after the southern crop has passed. The State also lies just at the eastern gateway to the grain-growing, grazing and mining districts of the west and northwest. Many of these districts, while rich in other interests, do not produce fruit enough for home consumption and they offer a growing market for Missouri products. The apple, which is less perishable, is shipped wherever there is a scarcity of this fruit. Easy railroad connection with the Gulf ports affords convenient shipment to the populous European countries, where there is a rapidly growing demand for American apples. In population and wealth Missouri is the fifth State in the Union. She has numerous large cities, which are rapidly growing. Her mining interests, especially in coal, iron, lead and zinc, are large. Her fertile soil and other natural resources maintain a large, and will maintain a larger population. This gives an unexcelled local market for all horticultural products.

Percentage of sunny days high.

No more wonderful yet easily explainable growth in the imperial west can be shown than in the progress of horticulture in Missouri. In 1880 Missouri was the tenth fruit State, in 1890 the fifth and now the first. In Missouri orchards in 1900, were over 20,000,000 apple trees. Now there are 25,000,000. New York stands next with about 15,000,000, Illinois third, having over 13,000,000 trees. Ohio comes fourth with nearly 13,000,000. Missouri's enormous apple orchard area is for the most part of comparatively recent planting. In 1890 this State had only



RALLS COUNTY APPLES—J. O. ALLISON.



Sun and rain bring  
great fruit crops.

Central position  
favorable to  
marketing.

Enormous growth  
of fruit tree  
acreage in recent  
years.

two-fifths of its present number of apple trees in orchard, or about 8,000,000. This shows an increase of 12,000,000 trees or 150 per cent for the decade, a growth in this industry such as has not been approached by any other State. The States which, next to Missouri, show the largest increase in apple orchards for the decade, are Illinois, Kansas, and Arkansas, in the order named. This shows that Missouri is now the center of activity in apple growing which is shifting from the older States to the middle west.



STARK BROTHERS NURSERY, PIKE COUNTY—  
LARGEST IN THE WORLD.

Since 1900 apple planting in Missouri has continued to increase with accelerating rapidity; well trained business men are planting apple orchards as a commercial investment; professional men are investing their savings in apple orchards; large companies are being formed and immense areas are being planted out, under the supervision of salaried superintendents; farmers are planting large apple orchards as one of the most important phases of general agriculture. Orchards numbering thousands of acres are not uncommon in the State and those numbering hundreds of acres are of frequent occurrence. Yet not one hundredth part of the land adapted to apple growing is utilized.



PERRY COUNTY VINEYARD.

Most successful  
varieties of apples.

The most successful apples in Missouri are: Early—Yellow Transparent, Early Harvest, Red June, Benoni, Early Pennock, Duchess, Lowell; Fall—Maiden Blush, Wealthy, Jefferies, Grimes Golden, Jonathan, Rome Beauty; Winter—Gano, Winesap, York, Black Twig, Ingram, White Winter Pippin, Huntsman, Ben Davis.

Missouri has not yet reached the highest mark in apple production. This is because her orchards are young. Less than half the apple trees in the State

Leads the world in  
apples.

Center of activity  
in apple growing.



HOWELL COUNTY VINEYARD.

are old enough to bear fruit and only a small proportion of them have reached full bearing age. When the trees now planted come into full bearing Missouri

will undoubtedly take first rank in apple production which rank she has already taken in the number of her trees.

Among Missouri fruits the peach ranks next to the apple in importance. The Ozark region particularly is famous the country over for its peaches, and Mis-

Apple growing as a business investment.



IN A COOPER COUNTY ORCHARD—W. H. H. STEPHENS.

souri is the leading State in peach growing. Peach orchards comprising hundreds of acres are common in the southern part of the State. The red clay soil, mixed with gravel, in the Ozarks and the loess soil along the two great rivers are the principal peach soils of the State. Missouri peach orchards are remarkably free from serious diseases, such as yellows, rosette and little peach, which have

Peach growing next in importance to apple growing.

often been so disastrous to the industry in some of the older States.

The best varieties of peaches in Missouri are the Mountain Rose, Champion, Carmen, Family Favorite, Elberta, Old Mixon freestone and clingstone, Pickett's Late, Wheatland, Salway, Wilkins, Bonanza and Henrietta.

The berries rank third in horticultural importance. Berry growing is most extensively developed in the vicinity of the large cities and in special localities from which the product is shipped to other States. For local consumption, however, berries are successfully grown in every county in the State. Missouri berries are shipped to all the principal markets east of the Rocky Mountains. Southwest Missouri is one of the largest berry-growing districts in the United States. A number of towns ship several hundred car loads each season. Among these are Neosho, Sarcxie, Pierce City, Monett, Marionville, West Plains and Olden. Each car load makes about 600 crates and sells at \$600 to \$1,000 a car. In some instances sales from Missouri berry plantations amount to \$300 to \$500 an acre, but \$100 to \$200 is a good average yield. Among the best varieties are the Crescent, Warfield, Aroma, Parker Earle, Bubach and Haviland strawberries; the Hopkins, Ohio, Kansas, Evans and Cumberland black raspberries; the Cuthbert, Thwack, Lowden and Miller red raspberries; the Early Harvest, Snyder and Taylor blackberries; and the Lucretia dewberry.

Young orchards and their future.



APPLE ORCHARD TEN YEARS OLD, SALINE COUNTY.

Best varieties of peaches.



Grape growing is developed to an important degree along the river hills and in many

TRAIN LOAD OF PEACHES ON FRISCO RAILROAD.

sections of the Ozark region. Hermann, on the Missouri river, is noted for extensive wine making.

Grape growing  
important.

No better grape soil can be found than the loess hills of the Missouri river, Missouri occupies an enviable position with regard to the introduction of new varieties of berries and grapes. Among those who have added to the world's wealth of fruit in this way are Herman Jeager, of Neosho; Jacob Rommell, of Morrison; Samuel Miller, of Bluffton; J. C. Evans, of Harlem, and the late George Hussman, of Columbia.

The cherry, though not as yet largely grown in Missouri, is a most profitable crop from the Missouri river northward. Among the best varieties are the Richmond, Ostheim, English Morello, Dyhouse, Montmorency and Wragg.

Cherries a most  
profitable crop.



HAULING PEACHES TO THE RAILROAD.

The nursery interests of the State are developed in keeping with the large fruit-growing industry. The most extensive nursery in the United States has

its headquarters in this State, with branches in the east and south. Millions of young trees are annually grown by this firm alone and sent to various parts of the world. One of the important interests is growing stocks, resistant of some of the diseases that are prevalent in some of the older fruit-growing countries.



APPLE ORCHARD SIX YEARS OLD, LAWRENCE COUNTY.

An acre of berries  
yielding five  
hundred dollars.

The growing of cut flowers near the large cities, has reached important proportions in recent years. The rose, carnation, violet and bulbous plants take the lead in this industry. The large percentage of sunny days in winter, combined with the mild climate, give the State an important advantage over the Atlantic states for growing winter-forced plants under glass. St. Louis is one of the leading centers of the country for growing and distributing greenhouse and hot-bed plants.

The vegetable growing industry is of importance, especially in the vicinity of the large cities and in special localities. Southeast Missouri ships immense quantities of melons. Tomatoes are largely grown for shipping and for canning, especially in southwest Missouri. This is an important auxiliary to peach growing, the tomato often being grown between young peach trees, where it pays for the cultivation of the orchard until it comes into bearing.

Vegetable growing  
a large industry.



PICKING STRAWBERRIES, NEWTON COUNTY.

The value of Missouri orchards reaches \$30,000,000 for apples, \$10,000,000 for peaches, \$3,000,000 for other fruits, and at least \$5,000,000 for the berry and



APPLE ORCHARD FIVE YEARS OLD, DENT COUNTY.

grape plantations. A full crop is worth \$20,000,000. In three years this will be increased 50 per cent because the younger trees will have come into bearing. The floral and greenhouse interests aggregate \$2,000,000, the vegetable truck gardens \$3,000,000, and the nursery interests \$4,000,000.

Largest nurseries the world.

The widespread extension of cold storage takes care of apple and other fruit crops, keeping prices uniform. Canning factories, evaporators, and cider mills are being built in many towns.

The Missouri State Horticultural Society was organized forty-six years ago, for the promotion of horticultural work in the State. Its influence has been far-reaching in developing Missouri horticulture. Some of the largest fruit growers and most prominent horticulturists of the country have from time to time been identified with the work of this organization. Its annual reports contain the most valuable data extant, concerning the history and development of the fruit-growing industry of Missouri. The Missouri Botanical Garden, at St. Louis, being of international influence and importance, can not fail, with its splendid equipment, to lend an especially strengthening influence to the horticulture of the State in which it is located. The State University, at Columbia, maintains a college of agriculture and agricultural experiment station in which horticultural instruction and horticultural investigations are carried on. Some of the departments of pure science, particularly botany, entomology, and chemistry, carry on investigations having a direct horticultural bearing.



STRAWBERRY FIELDS AT LOGAN, LAWRENCE COUNTY.

Missouri State Horticultural Society and its splendid work.

The State Fruit Experiment Station, at Mountain Grove, is located in one of the representative fruit sections of the Ozark region. Its work deals with the practical and scientific problems that confront the fruit grower and horticulturist. On account of the scope and quality of the work done in this station, the horticultural interests of the State are greatly strengthened. The Normal Schools of the State maintain departments of agriculture. In these departments the teachers of the



PICKING PEACHES, TEXAS COUNTY.

Fruit experiment station only one in the United States.



APPLE ORCHARD FIVE YEARS OLD, DOUGLAS COUNTY.

struction in agriculture, which bears more or less directly upon horticultural interests.

While horticulture is already one of the leading industries of Missouri, the limit of the possibilities of the State in that direction has not as yet been even approached. Only a small part of the area naturally well adapted to fruit growing and gardening has as yet been developed. Lands that



APPLE ORCHARD, DALLAS COUNTY.

are adapted to fruit growing are cheaper in proportion to their intrinsic value than in most other fruit sections. In recent years, however, steps in advance are rapidly being taken along horticultural lines. The best growers no longer cling to ancient traditions and obsolete practices, but are evolving methods adapted to the new conditions of the west. Capitalists of extensive business training are investing in orchards and their business ability, combined with the skill of the practical grower, is resulting in better marketing and in better management of the industry.



BUTTERFIELD NURSERY, FARMINGTON, ON THE IRON MOUNTAIN RAILROAD.

New varieties, better adapted to local conditions, are being originated. The horticultural interests of the State, already large, bid fair to assume enormous proportions.



HOME OF A MISSOURI HORTICULTURIST.

Value of Missouri's investment in fruit.

Abundant opportunity for large horticultural development.

State receive instruction in nature study and school gardening as well as in general agriculture. This is a unique feature in normal school work. Many teachers in the public schools of the State give in-



**M**ISSOURI is a dairy State. Its climate, soil, situation with reference to the great

markets, give proof that it will be even greater as a dairy State. In no State in the Federal Union are natural conditions so favorable for dairying. The most valuable or highest-priced ingredient in milk is butter fat. A cow, highly organized and sensitive, is readily affected by physical conditions. A cold, disagreeable climate and a warm enervating climate are alike hurtful. In neither can dairying succeed as well as in a more temperate region. Missouri is a dairy State because of its favorable climate. During its long summers and its short winters, a cow requires less reserve force to protect her, consequently can use her energy to the manu-

facture of milk. Missouri is well calculated for dairying because of its abundance of good water at all seasons of the year. In many sections of the State there are springs that furnish water and at the same time are valuable in handling milk by reducing temperature. In connection and in addition to climate and water is the question of feed. Here Missouri occupies an enviable position. There is no cow feed raised that can not be produced in this State. All of those products of the soil that go to make a large quantity and a good quality of milk are either being produced now or can be if desired. The luxuriant growth of grass is the finest in the world, more especially blue grass, which is of the greatest abundance all over the State, and makes an early pasture and lasts until late in the season, providing the dairy cow with such food as she needs for an abundant production of good rich milk. Large quantities of alfalfa are grown. This is valuable not only for its merit as cow feed, but because of the immense quantity that can be produced in one season. Two or three crops can be grown in one year and a large quantity per acre. Cowpeas grow luxuri-

Missouri a dairy State.

Because of its favorable clim

Because of its abundance of good water.

Because of its variety of cow feed.



DAIRY BARN, MARSHALL GORDON, COLUMBIA.

antly. Kafir corn and sugar cane are products of this State. All are valuable as cow feed. The most valuable and high-priced butter is June butter, butter with a grass flavor, a fresh taste and a good rich color. The long-continued grass season in Missouri, including the rich fall pastures, enables Missouri to make more of the June butter than other States.

Well located with  
reference to  
profitable mar-  
kets.

The State is well located with reference to dairy markets. In the southwest dairying is impracticable. Missouri is near to this great and growing market. The south, southwest and portions of the west, where conditions are unfavorable to profitable dairying, are nearest to the Missouri market. This gives advantage in cost of transportation and in quickness of delivery.

In itself a great  
market for dairy  
products.

Missouri is in itself a great market for its dairy products. A much larger output, if available, of dairy products would be consumed within the State. Missouri had in 1899, according to the federal census, 755,336 cows. The value of their output was \$15,420,360 or an average of \$19.66 a head. To-day there are at least 800,000 cows in Missouri with an average production of \$21.00 a head. These cows would produce in milk 320,000,000 gallons and in butter 32,000,000 pounds. Missouri consumes 112,500,000 pounds of butter and 4,000,000 pounds of cheese annually. These figures show how large a market yet unsupplied there exists for Missouri butter in Missouri.

Fifteen million  
dollars of dairy  
product.

Of the \$15,000,000 of dairy product produced in 1899 on Missouri farms, nearly \$10,000,000 was consumed on the farm, leaving little over \$5,000,000 to be sold. This shows prominently the local market advantage. The dairyman of



SKIM MILK CALVES, HENRY LOGAN, PETTIS COUNTY.

Missouri has the inestimable advantage of being close to a market that will consume all his output. He may sell all his dairy product at his barn door.

Much has been done of late to develop interest in dairying in this State. The Missouri State Dairy Association, probably the largest association of its kind in the United States, the creameries recently established and the dairy work in the Missouri Agricultural College have stimulated dairying. In addition there is no question but the plan of handling milk on the farm, through the medium of hand separators, is bringing to bear a strong pressure towards the

Missouri State  
Dairy Association  
largest in the  
United States.



DAIRY BARN, E. C. DAMERON, CLARKSVILLE, PIKE COUNTY.

rapid development of dairying in Missouri. By the use of a hand separator not only much expense and labor is eliminated but a decided increase in value is given to that part of the milk which is left at home. The butter fat can be sold at a good price and the skimmed milk fed to calves and pigs. More money is thus made at less trouble. The dairymen need not patronize any particular creamery or skimming station or cheese factory for it is possible, under this new plan, to ship cream to any of a dozen markets. This profitable change has been the cause of a transformation in the business and a strong increase of sentiment for dairying.

Transformation in  
the business.



BUTTER MAKING IN A CITY PLANT.

The Blue Valley Creamery in St. Joseph, which was established in 1901, manufactures only pure creamery butter and is the only one of the large factories probably, in the west, that does not handle some other product in connection with the manufacture of butter. It is supposed to be the largest exclusive pure creamery butter factory in the world, and although only two years old, has an annual output of about six and a fourth million pounds, sold largely direct to the consumer. The butter is made of separated cream prepared

Largest exclusive  
pure creamery  
butter factory.



on the farm and shipped from ten to four hundred miles. This butter grades as extras when shipped to the New York market and stands high in markets where it is sold. The number of patrons of this creamery is about 4,500.

The Appleton City Cheese Company, at Appleton City, established in 1885, operates all year, has sixty patrons, and handles 1,713,082 pounds of milk. Out of this was made 164,614 pounds of cheese, one-third shipped out of the State.

L. H. Smith, at Ravenna, has a cheese factory which was established in 1897. He operates it seven months each year. He had last year forty patrons; bought 407,889 pounds of milk, made 42,071 pounds of cheese, and sold about one-eighth of the amount locally.

The Model Cheese Company, in Caldwell county, south of Cameron, was es-

tablished in 1900; operates the entire year; had twenty-three patrons last year; handled 739,670 pounds of milk and made 71,931 pounds of cheese, 1,200 pounds of which was sold locally and the remaining amount shipped to Kansas City.

John Hiatt, of Polo, owns and operates a cheese factory that was established in 1901. He operates it the entire year; had last year thirty-five patrons and bought 270,000 pounds

of milk; made about 7,900 pounds of cheese; sold 2,400 pounds of it locally, the rest in different parts of the State, except about 600 pounds which was sold outside.

R. T. McCaskey, at Altamont, has a cheese factory, established in 1897, and operated twelve months in the year. Last year he had fifty-two patrons; handled 1,080,000 pounds of milk, and made 108,000 pounds of cheese.

There are in active operation in Missouri fifty creameries, twenty-nine cheese factories, and twenty skimming stations, which are adjuncts to the creameries in operation.

There are some remarkable records of individual cows and herds of cows in the State of Missouri. No better evidence of the adaptability of this country for doing a dairy business exists than these records. The figures refer to a single year's product.

C. J. Oswald, of Asbury, reports that he has a cow in his herd, which is a mixed herd of, what he regards, the ordinary scrub cow, that during the flush, or for several months after lactation, gave from 45 to 50 pounds of milk a day that tested six per cent butter fat. This is a remarkable record and would do justice to a special dairy cow, thoroughbred, and intended for dairying alone.

D. P. Daniels & Son, of Vandalia, have twelve cows, mixed Guernsey and Jersey, which produced \$828 worth of material. With the exception of a little used at home, this was made into butter and sold.

W. W. Belford, of 1826 Wall street, Joplin, reports nine cows, mixed breed, that were milked on an average of eleven months during the year, and milk was sold from these cows for \$1,000.

Cheese factories  
in operation.



JERSEY HERD, SETTLES & SETTLES, PALMYRA.



SKIMMING STATION, LINN CO.

Records of  
individual cows.

J. A. Humphrey, of Marshall, milked from 50 to 63 cows and sold the product for \$4,876.50.

E. & E. J. Hosmer, of Marshfield, milked 71 cows, mixture Shorthorn and Jersey. These cows averaged over 340 pounds of butter which was sold for 23 cents a pound. One cow produced over 560 pounds.

A. J. Girdner, of Princeton, who milks thirty cows, sold his calves, which were fed on separator skimmed milk, for \$22 a head.

As an evidence of the value of skimmed milk to feed pigs, G. E. Taylor, of Wheeling, states that nine pigs, from the time they were three weeks old, fed exclusively warm milk from the separator, when 105 days old averaged 104½ pounds a head. He had fed them in connection with this milk during that time, 15 bushels of corn and sold them for five and a half cents a pound, or \$51.18. The corn he fed them cost \$6.20; the rest was made out of something that is too apt to be considered worthless.

J. M. Smith, of Brookfield, milks 40 cows, mixed breed, and he sold their product for \$2,400.

'Squire Innis, of Nevada, milked 22 cows, mixed breed, and sold 11,000 gallons of milk; 480 gallons of cream; used 350 gallons of milk at home, 25 gallons of cream, and 100 pounds of butter, and fed 50 gallons of new milk to his calves. Figuring the milk, cream and butter used at home the same as that sold, he realized from these cows \$119.50 each.

THE  
SEPARATOR  
THAT  
MAKES  
DAIRYING  
DIFFERENT.



Value of skimmed  
milk to feed pigs.



A MODERN DAIRY WAGON, CARTHAGE.

Charles A. Foster, of Trenton, milked six registered Jerseys and sold their product for an average of \$113 from each cow.

S. W. Coleman, of Sedalia, milked seven cows, registered Jerseys. He averaged 400 pounds of butter for each, sold it at 25 cents a pound, and the

William Riehl, of Potosi, milked 15 Grade Jerseys, 6 of them heifers and realized for the butter, at 23 cents a pound, \$800.

Some Jersey records.

F. D. Hersey, of Trenton, milked 12 Shorthorns and realized for the product, \$844.53.

E. B. Cooper, of Trenton, milked 25 registered Jerseys, realizing for the product, \$2,050.

skimmed milk fed to calves and pigs. One-half of the herd were two-year-old heifers. In addition to the \$100 average realized for butter made from the cows,



LEAVING CREAM AT CITY STATION.

he sold \$850 worth of hogs. The amount of feed he bought for cows and hogs cost \$700, which left a net profit of \$850. He does this on ten acres of land, what is called the ideal ten-acre farm.

George W. Koontz, of Carthage, has 31 Jersey cows, which brought \$3,161.70 for butter, most at 25 cents a pound, the remainder at 30 cents. The average production of these cows was 352 pounds. They realized about \$102 a head, which is the largest average he has ever realized, although the year previous he made more butter per cow. In addition he had the usual profit from calves and pigs, which were fed on the warm, sweet skimmed milk from the separator. He had from this herd in 1903, 23 calves.

J. W. Chapman, of Joplin, milked 143 cows and sold their product for \$18,190, making an average of \$127.13. A large proportion of this was sold as milk and the rest of it as cream.

Figures that prove  
the story.



LOADING CREAM AT IRON MOUNTAIN RAILWAY STATION.

L. P. Dix, of Jefferson City, milked eight cows, Grade Jerseys, and averaged from their product \$97.50.

Mrs. Lizzie McKeever, of Richmond, has a herd of 12 cows, Holstein and Jersey. She realized from them an average of \$87.58 each.

M. L. Brooks, of Dawn, milked 24 cows, Grade Jerseys, and realized from them an average of \$69.70. This was for butter at an average price of 23 cents a pound.

H. C. Goodrich, of Calhoun, milked 32 cows. He churned 331 pounds of butter per cow and used in cream and milk for the family about seven pounds per cow, making an average production from his entire herd of 338 pounds of butter. Deducting the expense of packing and marketing, he realized 23 4-5 cents a pound, which amounted to \$80.44 per head. He fed these cows \$426.05 worth of bran, \$54 worth of corn, \$100 worth of silage, \$276.72 worth of hay and fodder, \$25 worth of soy beans, \$105 worth of pasture, making in all \$986, or \$33.83 per head. He charged three cents a pound for making the butter, which amounted to \$10.44 for each cow, and estimated 15 per cent on the money invested in cows to pay interest, insurance and keeping up the herd, which amounted to \$7.50 a cow. This estimate was made on \$50 each, which was a good strong price. He figured that the calves, skim milk and fertilizer would pay for keeping the herd. This makes a total of all expenses connected with the business of \$48.17 per head. This pays for every thing they ate, making the butter, and interest on the investment and leaves a net balance of \$31.90 per head. Could there be stronger argu-



BLUE VALLEY CREAMERY COMPANY,  
ST. JOSEPH.



ment for dairying in Missouri than actual records?

A strict accounting  
and what it  
shows.

Fred Manley, of Warrensburg, fed ten hogs on skimmed milk and corn. and made them weigh 204 pounds at 6 months and 27 days. He fed ten others on corn and ground wheat and they only weighed 184 pounds at 9 months and 15 days.

JERRY—OWNED BY PER SWAINSON, VERNON COUNTY. milked, last year, twelve. He sold from those twelve cows, \$1,077.55 worth of cream and butter, and consumed \$155.30, which made the total output from those twelve cows, \$1,232.85.

Mr. Shelpman estimates that, counting the returns from skimmed milk and calves, each cow belonging to him brings him every twelve months, gross, \$150.

Thomas P. Emmons, of Thayer, Oregon county, reports as a result from 20 cows last year, \$2,054 worth of milk, from a mixed herd of cows.

C. H. Dunlap, of Sedalia, reports \$5,050 as the value of products from 40 head of cows last year, which is an average of a little over \$125 each.

To this may be added the story of Jerry, owned by Per Swainson, of Nevada, whose existence dates from January, 1885. This cow was a wedding present to

How dairying pays.



RECEIVING MILK AT ST. LOUIS DAIRY COMPANY'S PLANT.

The record of Jerry.

Mr. Swainson, and valued highly on that account as well as for the returns from her all these years. She is a thoroughbred Jersey. She had her first calf in 1887; has had seventeen calves and produced 93,125 pounds of milk. The most of this milk has been sold in town at 20 cents a gallon; figured at this price, her product has been worth \$2,330.40. In addition to this Mr. Swainson has sold \$665 worth of calves and has nine head now, which he values at \$265, which would make a total product of \$3,260. The first year she was milked continuously; after that time she was allowed to go dry about six weeks each year. He made a special test of this cow for one week on ordinary feed and got about five gallons of milk a day that tested five per cent; figuring his milk on this basis, if it had been made into butter, he would have had nearly 8,000 pounds of butter which, at 25 cents a pound, would have brought him about \$2,000.

There are two large creameries in Kansas City, the Meriden Creamery Company and the O. F. Chandler & Co., which manufacture respectively probably

about two million and a half, and a million pounds of butter. From thirteen creameries are reported 1,213 patrons, an average of 93. These creameries manufactured 1,211,445 pounds of butter, an average of 93,188 pounds. These are probably a little over the average creameries. For the rest of the 50 that are counted in the State, about 730,000 pounds of butter is reported; 25,000 pounds having been shipped out of the State,

which probably is an average for all the creameries, materially increases the deficit for supplying the demand for home consumption. These factories were operated the entire year and the average price paid was probably about 22 cents a pound for butter fat. This is a very good price and will compare favorably with the price paid in the east, where dairying is carried on more extensively.

Twelve skimming stations report 713 patrons for last year, and have handled 6,968,817 pounds of milk, making an average of 580,734 pounds. A portion of this was shipped to be manufactured into butter and the remainder used for sweet cream trade in the cities and for making ice cream.

These are some of the reasons why Missouri has a bright future as a dairy State. The conditions of the soil, and climate, are favorable. The market is at the very door. Modern methods have been introduced and there is a growing interest in dairying throughout the commonwealth.

Two large creameries in Kansas City.



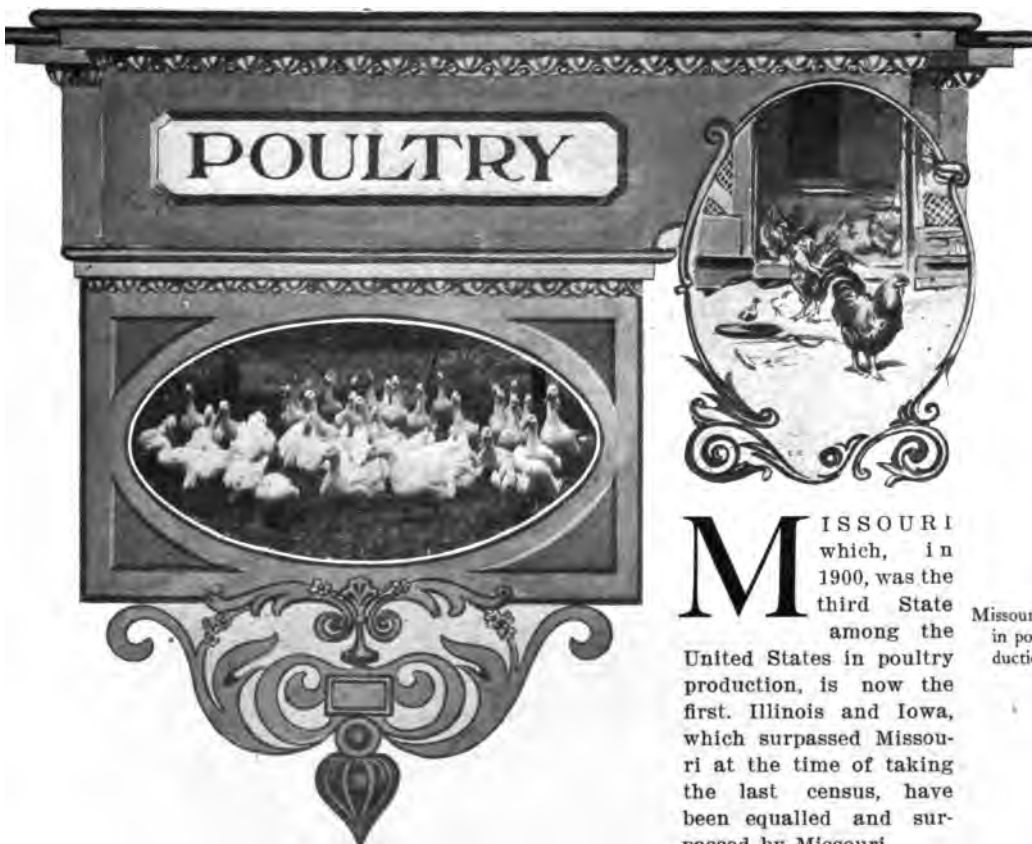
CHEESE MAKING,  
FRANK MOULTON,  
COWGILL.

Skimming stations and their output.

The future of Missouri dairying.



SKIM MILK PIGS.



**M**ISSOURI which, in 1900, was the third State among the United States in poultry production, is now the first. Illinois and Iowa, which surpassed Missouri at the time of taking the last census, have been equalled and surpassed by Missouri.

Missouri first State in poultry production.

Poultry raising is general throughout the State, the climatic conditions and the accessible markets combining to make it profitable. The Missouri mule is famous. Last year the surplus products of the Missouri hen exceeded by \$2,000,000 the value of mules shipped out of the State. Over 60,000,000 dozen eggs were shipped from Missouri. If this be counted as two-fifths of the entire product—the other three-fifths being consumed in the State—over 150,000,000 dozen eggs constitute the annual product of the Missouri hen. Estimating the eggs at 10 cents a dozen, the egg product alone of the Missouri poultry yard aggregates \$15,000,000. No other product of the farm brings so much cash to the farmer or the farmer's wife. In addition to the eggs, there were shipped from Missouri during the last year, 85,835,750 pounds of poultry, valued at \$1,285,870. Estimating this as two-fifths of the poultry grown, this would amount to over 210,000,000 pounds, valued at exceeding \$3,200,000.

Has surpassed Illinois and Iowa.



County for county, Marion leads. Not including fancy poultry, eggs for hatching, nor what was consumed at home, the shipments from that county amount to \$886,237.45 a year, with Pettis a close second. Franklin county is second in egg shipments with a total of 2,437,650 dozen eggs, and Lincoln is third, with a total of 2,117,920 dozen. The first seventeen counties in poultry shipments are Marion, Pettis, Greene,

Sixty million"doze eggs shipped from the State.

Henry, Lincoln, Franklin, Boone, Carroll, Sullivan, Daviess, Nodaway, Grundy, Polk, Vernon, Macon, Ray, and Cass.

Nearly a million dollars in one year a single county's profits from poultry.

## No. 1.

[illegible]

It is not an accident that the American people have been so responsive to the message of the American Revolution. The American people have been so responsive to the message of the American Revolution because they have been so responsive to the message of the American Revolution.

[illegible]



**L**EADERSHIP in manufactures depends upon the possession of raw materials in economic proximity, cheap and abundant fuel and food supply. All these Missouri has in pre-eminent degree. The raw material furnished by mine and field and forest, coal for fuel and the most fertile soil for food products combine in this commonwealth.

Upon what leadership in manufactures depends.

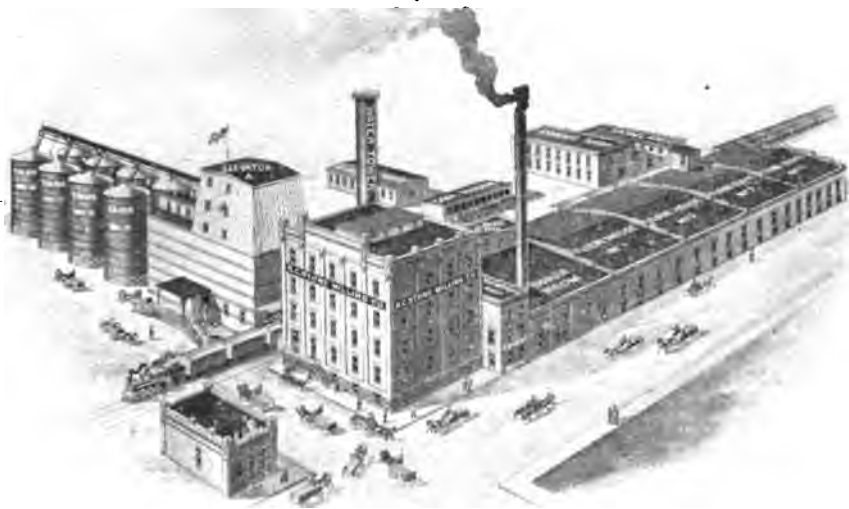
Twenty-six thousand square miles of Missouri soil are underlaid with coal, a larger area than the coal fields of England which made that little island foremost for commerce and manufacture. At the border of the State are the coal fields of Illinois and Arkansas. Within easy reach are the anthracite mines of the east. Transportation facilities are large and increasing. New coal fields are being opened up.

Manufacturing is an urban industry. The most populous Missouri city, St. Louis, is also its largest manufacturing center, the fourth in the United States, and in some branches of manufacture the first. In the manufacturing and mechanical industries St. Louis employed, in 1900, \$162,179,331, paying \$38,191,076 in wages to 82,672 wage-earners, and producing \$233,629,733 worth of goods, including custom work and repairing, making busy 6,732 establishments. Twenty-five trunk lines of railway comprising nearly 6,000 miles of track and 6,000 miles of river navigation, with five bridges spanning the Mississippi and Missouri rivers indicate the importance of the city's commerce. Kansas City had some 1,500 manufacturing establishments with an annual output of \$35,000,000. In 1900 St. Joseph had 440 manufacturing establishments with an annual product of \$31,000,000.

Larger area of coal fields than has England.

The further localization of manufacturing labor is illustrated in the accompanying table which shows the number of manufacturing establishments in





R. C. STONE MILLING COMPANY, SPRINGFIELD.

twenty-five of the leading cities of Missouri. The total number in the State is 18,754, while in the twenty-five cities named there are 11,017 or 58.7 per cent of the total. The cities had 32.2 per cent of the State's population. The total number of wage-earners employed was 117,179.

St. Louis fourth  
largest manufacturing city in  
America.

The total of the product of the manufacturing and mechanical industries of St. Louis, Kansas City, St. Joseph and Springfield, by the census of 1890 and the census of 1900 are thus reported:

	<i>St. Louis.</i>	<i>Kansas City.</i>	<i>St. Joseph.</i>	<i>Springfield.</i>
1890 .....	\$229,157,343	\$31,936,366	\$11,916,141	\$3,062,095
1900 .....	233,629,733	36,527,392	31,690,736	4,126,871
Per cent of increase. . . . .	2.0	14.4	165.9	34.8

What is manufactured in Missouri? What position does the State occupy with reference to manufacturing industry and commercial activity? What use



ATLAS PORTLAND CEMENT



W. S. DICKEY CLAY MANUFACTURING COMPANY, DEEPWATER, HENRY COUNTY.

has she made of the talents she is known to possess? And in what way can her great and growing prominence along lines of material prosperity be most instructively and entertainingly presented?

There were, in 1900, 18,754 manufacturing and mechanical industrial establishments in the State. They employed a capital of \$249,888,581. This capital was represented by: (1) Buildings valued at \$36,748,766; (2) land worth \$26,757,573; (3) machinery, tools, etc., that cost \$70,040,656; and (4) cash and sundries aggregating \$116,341,586.

Invested in manufacturing in Missouri.

An army of proprietors and firm members numbering 20,659 directed 13,900 salaried officials, clerks, etc., to whom they paid \$14,569,606. They also disbursed the princely sum of \$60,719,428 to another and larger army of wage-earners which mustered, 134,975 men, women and some children. Of this amount there was paid to 106,782 men, 16 years of age and over the vast sum of \$53,321,296; to 23,686 women, 16 years of age and over, \$6,041,960; and to 4,510 children under 16 years of age \$756,172.



COMPANY, RALLS COUNTY.



ROBERTS COTTON COMPANY, KENNETT, DUNKLIN COUNTY.

What is manufac-  
tured in  
Missouri?

In addition to disbursements, Missouri manufacturing enterprise was subject to miscellaneous expenses involved in the rent of works, taxes (not including internal revenue), rent of offices, interest and contract work, aggregating \$41,396,905; besides paying a bill of \$214,988,018 for materials, and the incidentals needed to carry on its gigantic operations.

As a reward for its skillful, energetic and sagacious use of its brains and cash, it rejoiced in a production valued at \$385,492,784.

The statement of these figures suggests the comforts, the luxuries of life to thousands. As one reads he may in fancy hear the rumble of ponderous



JOHN, DEERE PLOW COMPANY, KANSAS CITY.



ARMOUR PACKING COMPANY, KANSAS CITY.

machinery in the mill, the rattle and clatter of the factory and the workshop, and see the molten metal in the fiery furnaces. His mind will insensibly revert to comparisons of this with the olden time, as he thinks of Missouri's present and prospective production and trade.

Missouri leads the world in the manufacture of street cars and tobacco. Missouri among the States ranks second in babbitt metal, sixth in printing and publishing and seventh in gross value of manufactures. St. Louis is first in tobacco manufacture and street car construction, fourth as a manufacturing city and fifth in boots and shoes made and sold.

Missouri is sixth in the manufacture of flour, St. Louis being fifth among the great cities of the United States. There are 593 merchant mills in the State

Leads the world in certain manufactures.

AMERICAN  
BANK  
BUILDING.GEO. B. PECK DRY  
GOODS CO.SOME KANSAS CITY  
BUSINESS BLOCKS.EMERY, BIRD,  
THAYER & CO.BOARD OF TRADE  
BUILDING.

MISSOURI  
 STOCK  
 YARDS  
 ST. LOUIS  
 MO.  
 1902



AERIAL VIEW OF KANSAS CITY STOCK YARDS.

The value of the product aggregated 62,503,965 pounds. The total for Missouri in 1902 was 1,000,000 pounds.

The value of the product of the State has grown from a product of \$5,265,617 in 1890 to \$11,177,329 in 1900. The receipts of lumber in St. Louis in 1902 were 1,000,000 feet.

The value of the product of the United States is made in Missouri. The value of the product of the State in 1902 amounted to 10,000,000 pounds.

The value of the product of the world in the amount of shelf hardware in 1902 was 1,000,000 pounds.

The value of the product of the world in 1902 was 2,707,508 barrels. The value of the product of the world in 1902 was \$18,000,000. The largest brewery in the world is in St. Louis.

As a wholesale shoe market of a product largely locally manufactured Missouri is growing in trade supremacy. The total shipments show a gain in one year, 1902 over 1901 of 8 per cent. The rapid increase is due largely to the phenomenal growth in manufacturing facilities, particularly in St. Louis. There has been a corresponding decrease in receipts from Boston, which has been a large seller of shoes to this part of the country, and several new manufacturing centers are also now competing with the Boston district. St. Louis makes large shipments of shoes to foreign points, especially to Mexico, the West Indies and Central America. As a jobber of shoes St. Louis now holds first place. Fully one-half of the goods sold are made in St. Louis factories and are of the better grades. St. Louis has been a noted center of boot and shoe manufacture for many years and its jobbing trade in these articles footed up \$43,500,000 in 1901.

St. Louis manufactures more tobacco than any city in the world.



ST. CHARLES CAR MANUFACTURING SHOPS.

In the decade from 1890 to 1900 St. Louis nearly doubled the value of its shoe product, being in the latter year \$8,286,156.

The largest drug market in the world is St. Louis. The trade has entered the manufacturing field also and now put out their own pharmaceutical and proprietary goods in addition to which many of the heavy chemicals are manufactured, resulting altogether in aggregate sales of \$40,000,000.

Lumber industry important.

Missouri manufactures may be classified under some 250 heads, covering all branches of manufacturing industry.



HYDRAULIC PRESS BRICK COMPANY, ST. LOUIS COUNTY.

COMPARATIVE SUMMARY OF MANUFACTURES FROM 1850 TO 1900, WITH

Result of the  
factory output.

YEAR	1900	1890	1880	*1870	1860
Establishments	18,754	14,052	8,592	11,871	3,157
Capital	\$249,888,581	\$189,558,546	\$ 72,507,844	\$ 80,257,244	\$ 20,034,220
Cost of Material used	214,988,018	177,582,382	110,798,392	115,533,269	23,849,941
Value of Products	385,492,784	324,561,993	165,386,205	206,213,429	41,782,731
Total Wages	60,719,428	59,643,429	24,309,716	31,055,445	6,669,916

\*The Census for 1870 was defective.

Record of  
Missouri manu-  
factures.

The agricultural implement factories manufactured in 1902 goods worth \$1,321,785; those making awnings, tents and flags, \$1,015,350; bakeries, \$6,319,521; badges and regalia, \$26,000; bags and bagging, \$4,110,901; boilers and tanks, \$1,252,557; paper boxes, \$491,724; boxes, wood, \$1,807,820; brick and tile factories, \$3,604,900; boots and shoes, \$11,668,392; bar and store fixtures, \$1,035,412; brooms and brushes, \$194,105; candy and confectionery, \$3,503,974; carriages and wagons, \$5,252,803; coffins and burial cases, \$1,080,207; copper and brass goods, \$2,161,272; cooperage, \$3,264,015; car works, \$11,487,441; cigar factories, \$1,447,316; men's clothing, \$7,859,614; women's clothing, \$1,959,399; cotton factories, \$305,852; drugs, chemicals and druggists' sundries, \$6,674,151; electrical apparatus, \$1,002,931; flouring mills, \$19,816,268; foundry and machine shop products, \$12,939,938; furniture factories, \$4,327,565; grocers' sundries, \$4,110,039; glass



COTTON SEED OIL MILL, KENNETT, DUNKLIN COUNTY.

factories, \$1,856,871; harness and saddle factories, \$2,681,283; hats and caps, \$379,720; iron (structural and architectural), \$1,835,470; liquors, distilled, \$172,716; liquor, malt, \$17,755,288; leather factories, \$868,689; lumber sawed,



CORNER IN STORE OF J. H. BARCLAY DRY GOODS COMPANY, MACON.

\$3,598,340; lime and cement, \$1,131,961; oils and grease, \$1,872,771; pipe factories, \$335,415; printing and binding, \$7,140,288; packing houses, \$48,859,056; paints and varnish, \$5,649,818; planing mills, \$3,347,534; rubber goods, \$715,457; rolling mills, \$1,760,746; stoves and ranges, \$6,820,657; stone and marble works, \$909,959; soap, candle and glue factories, \$2,697,616; smelters, \$5,744,376; surgical and optical goods,

## PER CENT OF INCREASE FOR EACH DECADE

1850	PER CENT OF INCREASE BY DECADES				
	1890- 1900	1880- 1890	1870- 1880	1860- 1870	1850- 1860
2,923	33.5	63.5	-27.6	276.0	8.0
\$ 8,576,607	31.8	161.4	-9.7	300.6	133.6
12,798,351	21.1	60.3	-4.1	384.4	86.4
24,324,418	18.8	96.2	-19.8	393.5	71.8
4,692,648	1.8	145.3	-3.0	365.6	42.1

\$49,000; tinware, sheet iron and galvanized ironware, \$3,930,442; trunk and valise factories, \$992,214; tobacco factories, \$19,139,286; wire goods, \$1,296,106; woolen mills, \$393,174; miscellaneous, \$4,853,529; prison factories (seven in all, including one saddle tree, four boot and shoes, one broom, and one men's working clothing), \$2,692,934.

As a wholesale shoe market.

The banker is a necessary part of the success of industrial interests. Missouri leads in number of State banks and is thirteenth among the States in number of national banks. These banks have resources of nearly \$300,000,000. The per capita bank deposit of Missourians is \$136.81, scarcely exceeded by any other State.

The present State banking law was enacted in 1877. It provides for publication of statements, and makes it a felony to receive deposits after it is known

St. Louis largest drug market in the world.

## MANUFACTURES OF TWENTY-FIVE LEADING CITIES OF MISSOURI.



WATERWORKS  
TOWER,  
CARUTHERS-  
VILLE.

RANK*	CITIES	CAPITAL	WAGES EARN'D	VALUE OF PRODUCT
1	St. Louis	\$162,179,331	\$38,191,076	\$233,629,733
2	Kansas City	26,437,307	7,783,652	36,527,392
3	St. Joseph	11,068,825	3,109,647	31,690,736
4	Springfield	2,111,048	1,017,345	4,126,871
5	Jefferson City	1,627,434	169,124	3,361,998
6	St. Charles	1,940,719	601,987	3,145,662
7	Hannibal	1,890,718	611,859	3,025,349
8	Joplin	1,411,495	516,080	2,961,793
9	Sedalia	1,293,053	463,787	1,599,326
10	Carthage	859,385	217,237	1,176,981
11	Nevada	437,924	190,232	1,046,616
12	Moberly	551,453	353,641	950,664
13	Louisiana	453,470	90,531	908,088
14	Independence	505,645	100,982	886,354
15	Cape Girardeau	431,170	105,009	612,259
16	Chillicothe	323,685	114,007	608,767
17	Boonville	299,128	89,426	473,455
18	Trenton	205,715	113,508	459,748
19	Webb City	211,090	79,294	425,763
20	Mexico	261,617	68,230	415,894
21	Clinton	333,364	69,099	372,194
22	Maryville	180,075	66,789	333,883
23	Brookfield	101,293	89,698	329,889
24	Carrollton	215,760	41,445	311,368
25	Rich Hill	224,609	42,659	255,132

\*Rank in value of products.

Manufactures of  
twenty-five  
leading cities.

that a bank is in a falling condition. A revision of the banking law in 1899 authorizes the Secretary of State, before any banking corporation, individual banker or trust company shall commence business, to cause an examination to be made, in order to ascertain whether the requisite capital of such bank, banker or trust company has been paid in in cash. This is construed to mean that at least 50 per cent of each share of the capital stock must be paid, and be ready for use in transaction of business, over and above the amount invested in banking

State banking law.



## COMPARATIVE SUMMARY OF THE FOURTEEN LEADING INDUSTRIES OF THE STATE.

Industries	Year	No. of Estab- lish'ts	Capital Invested	Cost of the Materials Used	Value of the Product	Total Wages Paid per Year	Average No Wage Earners Per Year
Totals for the	1900	5,139	\$113,326,395	\$122,972,261	\$203,494,824	\$ 26,401,101	59,057
14 Industries	1890	3,667	85,918,067	93,055,297	155,920,549	23,144,690	50,674
Act. inc. '90-00		1,472	27,408,328	29,916,964	47,574,275	3,256,411	8,383
Per cent of inc.		40.1	31.9	32.1	30.5	14.1	16.5
Boots	1900	50	4,183,979	7,993,026	11,253,202	2,052,114	5,915
and Shoes	1890	29	3,712,915	2,521,027	4,841,004	1,119,370	2,716
Carriages and	1900	377	4,019,087	2,733,960	5,583,364	1,310,560	2,503
Wagons	1890	425	3,963,675	2,441,925	5,233,324	1,499,133	3,026
Car Construc- tion by R.R.	1900	43	3,645,260	3,019,574	6,524,121	3,182,753	5,581
	1890	27	1,394,974	2,082,326	3,890,542	1,737,771	2,859
Car Cons. by other concerns	1900	4	4,530,982	5,101,335	7,722,768	1,373,353	2,772
	1890	5	1,442,927	2,655,320	3,974,173	1,147,604	1,854
Men's clothing,	1900	148	4,651,882	5,095,156	8,925,088	1,693,725	6,129
fact'ry prod.	1890	59	4,966,073	4,566,017	8,113,852	1,772,799	6,113
Coffee and spice (roasting etc.)	1900	27	2,517,482	4,303,097	5,266,264	176,420	499
	1890	15	1,089,088	3,290,476	3,892,792	113,551	252
Confectionery	1900	99	2,842,164	3,476,112	5,554,384	662,513	2,058
	1890	75	1,440,173	2,120,762	3,584,953	520,767	1,454
Flouring, grist mill products	1900	1,145	11,402,827	21,937,507	26,393,928	851,377	1,654
	1890	710	12,630,645	29,210,639	34,486,795	1,249,091	3,011
Foundry and mach'shop	1900	261	11,606,445	6,732,008	15,073,005	3,882,749	7,084
	1890	186	11,708,878	5,819,009	13,680,773	3,807,974	6,754
Malt Liquors	1900	49	25,731,930	3,073,011	13,776,905	1,890,100	3,150
	1890	30	16,689,575	6,563,536	16,954,137	1,847,195	2,834
Lumber and Timber	1900	1,197	11,089,799	6,410,216	11,177,529	2,012,659	6,043
	1890	830	8,245,425	4,328,903	8,359,925	1,930,504	6,703
Printing and Publishing	1900	1,100	11,149,288	2,167,852	4,706,287	3,774,832	7,256
	1890	778	8,052,275	1,439,861	3,503,733	4,050,989	7,423
Slaughtering and Packing	1900	37	7,944,033	39,108,137	43,040,885	1,446,742	3,102
	1890	68	4,986,780	15,142,352	18,320,193	645,322	1,264
Tobacco	1900	602	8,011,237	9,282,841	27,847,432	2,097,204	5,231
	1890	430	5,594,664	8,809,272	17,583,646	1,702,600	4,411

Banking in  
Missouri.

house furniture and fixtures. All sums collected in connection with the execu-  
tion of this law are credited to the State bank examination fund. Any derelic-



PITTSBURG PLATE GLASS COMPANY, CRYSTAL CITY, JEFFERSON COUNTY.

tion from the law of the State binding upon corporations or bankers results in  
the institution of proceedings duly authorized by the laws of 1897 against insolv-  
ent banks.

The growth of banks organized under the State law is shown in the following comparison of their deposits at various periods since 1882:

1882 .....	\$ 52,980,358
1893 .....	61,705,242
1903 .....	136,649,641



FIRST NATIONAL BANK,  
CARTHAGE.

An official statement of the financial condition of Missouri State banks, issued by the Secretary of State on September 9, 1903, tabulates statements from 704 State banks and 22 trust companies. It gives the resources of incorporated banks, outside of St. Louis and Kansas City, as totaling \$107,018,736. The resources of St. Louis banks, \$58,629,457; those of Kansas City, \$5,837,618; the private banks had \$8,865,150, and the trust companies \$124,654,728 in resources. The grand total of resources of the banks of the State footed up \$180,350,962, not including the trust companies. The aggregate capital stock of the banks on September 9, 1903, was \$21,068,600. In February, 1904, a gain of \$683,400 was reported, due to the incorporation of new banks, \$473,000; increases of capitalization, \$210,400. The aggregate capital stock of the 22 trust companies on September 9, 1903, was \$21,712,900. Since then, by February, 1904, the capital stock in the trust companies has been increased to \$22,112,900. This gain of \$400,000 was caused by the organization of two new trust companies, one capitalized at \$150,000, the other at \$100,000, and by an increase in the original capitalization

Growth of banks.

of another one from \$150,000 to \$300,000. The trust companies are classified, according to their capitalization, as follows:

Five at \$50,000; one at \$55,000; one at \$63,700; two at \$75,000; one at \$80,000; one at \$100,000; one at \$150,000; one at \$187,500; one at \$226,000; one at \$250,000; one at \$300,000; two at \$1,000,000; two at \$2,000,000; three at \$3,000,000; one at \$5,000,000.

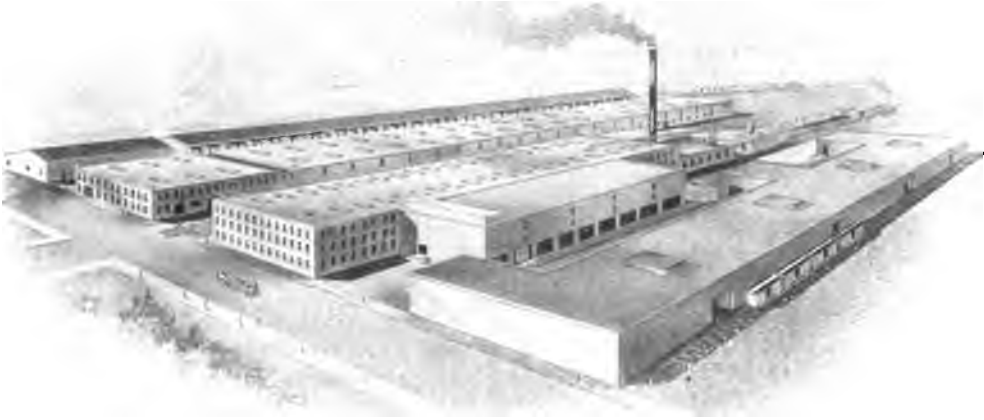
Resources of banking institutions.

A classification of the State banks by their capitalization, made in February, 1904, shows the following:

Two hundred and thirty-five at \$10,000; two at \$10,500; two at \$11,000; fifteen at \$12,000; five at \$12,500; one at \$13,000; one at \$14,000; sixty-six at \$15,000; seven at \$16,000; one at \$16,500; one at \$17,000; one at \$18,000; ninety-two at \$20,000; two at \$21,000; one at \$21,500; two at \$22,000; seventy-one at \$25,000; one at \$26,000; one at \$26,500; one at \$28,000; twenty-seven at \$30,000; one at \$33,000; three at \$35,500; sixteen at \$40,000; sixty-six at \$50,000; one at \$55,000; two at \$60,000; one at \$70,000; five at \$75,000; twenty-seven at \$100,000; one at \$125,000; two at \$150,000; seven at \$200,000; three at \$500,000; one at \$600,000; one at \$2,000,000.



RADCLIFFE MANUFACTURING COMPANY, AGENCY—LARGEST  
ESTABLISHMENT OF ITS KIND IN THE WORLD.



HUTTIG-MOSS MANUFACTURING COMPANY, ST. JOSEPH.

Classification of  
banks.

Private banks are those which receive money on deposit, with or without interest, buy and sell exchange, notes, current and uncurrent money bonds, stocks, etc., and loan money without being incorporated. There are 93 private banks, with a capitalization of \$840,000.



HIGH AND LOW BUILDINGS, ST. LOUIS—HOLLAND BUILDING, REPUBLIC BUILDING, MISSOURI TRUST BUILDING, CHEMICAL BUILDING.



**HARNESS FACTORY OF WILLIAM HECK, CALIFORNIA, MONITEAU COUNTY.**

Missouri has 84 national banks, divided by counties, thus: St. Louis (city), 7; Jasper, 8; Jackson, 7; Boone, Buchanan, Clinton, Nodaway, Pettis, 3 each; Adair, Caldwell, Gentry, Greene, Livingstone, Marion, Putnam, 2 each, and the following counties, one each: Andrew, Atchison, Audrain, Barry, Barton, Bates, Cape Girardeau, Carroll, Cass, Chariton, Clay, Cole, Cooper, Daviess, De Kalb, Dunklin, Franklin, Grundy, Harrison, Howell, Johnson, Lawrence, Macon, Moniteau, Monroe, Newton, Phelps, Scotland, St. Charles, St. Clair, Sullivan, Vernon, and Worth.

National Banks in  
Missouri.



**ST. LOUIS—WASHINGTON AVENUE, LOOKING WEST FROM THIRD STREET.**

160 THE STATE OF MISSOURI.

Domestic corporations in the State. This official statement shows the domestic corporations incorporated in the State of Missouri; also foreign corporations licensed to do business in this State, for a period commencing July 1, 1902, and ending June 30, 1903, the capital stock of each class of corporation being set forth in the aggregate:

DOMESTIC CORPORATIONS.

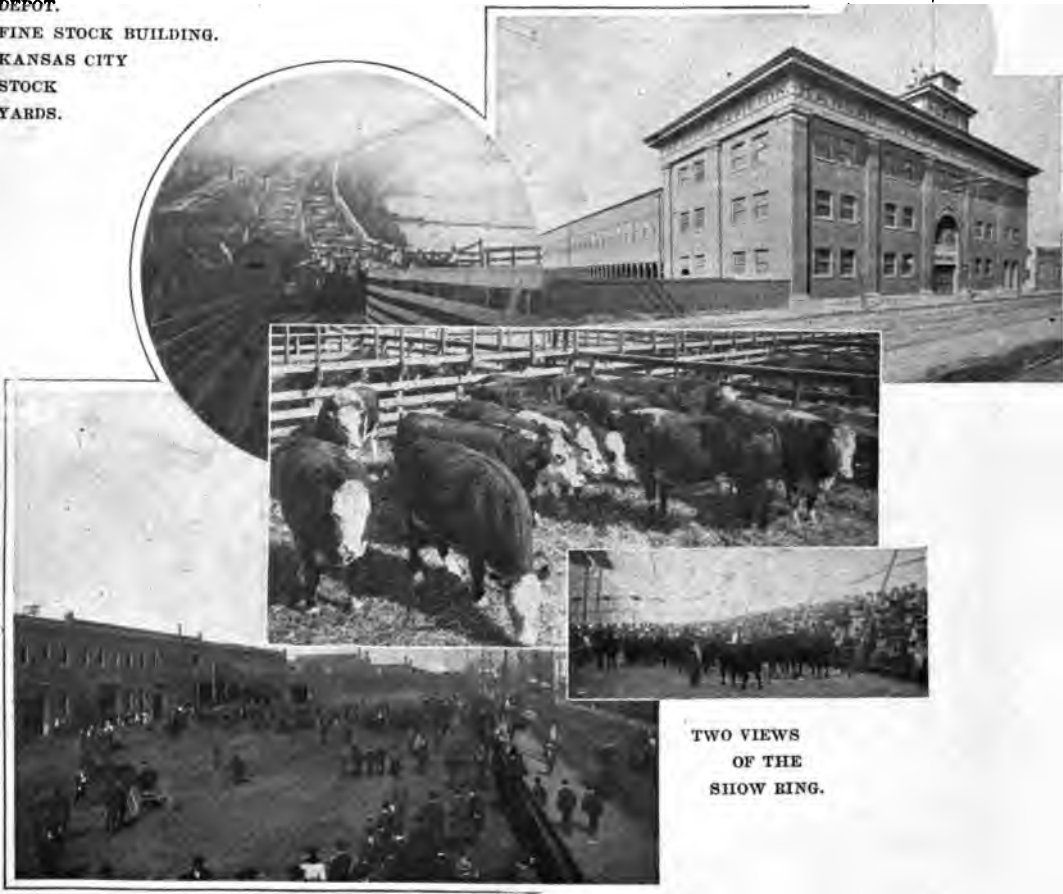
Manufacturing and business, total number	.....1,259; capital.....	\$79,433,200
Railroads, total number	..... 25; capital.....	20,935,000
Trust companies, total number.....	6; capital.....	2,150,000
Banks, total number	..... 73; capital.....	1,167,000
Telegraphs and Telephones, total number.....	28; capital.....	953,100
Street railways, total number	..... 6; capital.....	240,000
Total, domestic		\$104,878,310

FOREIGN CORPORATIONS.

Foreign corporations.	Total number, 119; total capital	.....\$200,631,000
-----------------------	----------------------------------	--------------------

Grand total .....\$305,509,310  
The growth of the value of Missouri commerce is vitally shown by these figures.

HORSE AND MULE  
DEPOT.  
FINE STOCK BUILDING.  
KANSAS CITY  
STOCK  
YARDS.



TWO VIEWS  
OF THE  
SHOW RING.

KANSAS CITY A GREAT LIVE STOCK CENTRE.



MACON SHEAR FACTORY AND BLEES CARRIAGE COMPANY, MACON.

Insurance companies wrote in 1903 about \$20,000,000 of premiums, fire and life in Missouri. There are licensed to do business in the State: three Missouri stock fire insurance companies, one insurance, Lloyds, 94 insurance stock fire companies of other states, 25 insurance companies of foreign countries, 9 Missouri regular mutual fire companies, 4 regular mutual fire insurance companies from other States, 10 town mutual companies, two Missouri life companies, and 46 life companies from other States. There are 12 Missouri trust companies and 38 trust companies from other States licensed to do fidelity and surety business. There are 91 fraternal beneficiary associations from Missouri and other States doing business in Missouri.

Insurance  
companies.



CHARLES MEIERHOFFER SAND PLANT, BOONVILLE.

The laws of Missouri require that all stock fire insurance companies which are organized in the State shall have a paid up capital stock of at least \$100,000, and companies admitted from other States must have a paid up capital of \$200,000, unless the company's home State will license a Missouri company having a capital of \$100,000 in which event companies from that State having \$100,

Missouri's insur-  
ance law.

000 capital will be admitted to Missouri. All foreign fire insurance companies must have a deposit capital of \$200,000 with some State officer of the United States before the company will be licensed in Missouri. Life insurance companies of other States and countries, before being admitted to Missouri, must file a certificate showing the company has deposited with some other State the sum of \$100,000 for the benefit and protection of all policy holders. Companies doing personal accident, plate glass and employers' liability insurance before being



CHARCOAL KILN AT NOEL, MCDONALD COUNTY.

admitted to Missouri, must file a certificate showing the company has \$100,000 on deposit with some State officer. Companies doing fidelity and surety business

in Missouri must file a certificate of deposit showing \$200,000 deposited with some State officer. The Missouri reciprocal law provides that whenever any State or county prescribes restrictions or increased fees or requirements upon Missouri companies, the Missouri Department shall enforce the same retaliatory provisions against companies of that State or county doing business in Missouri. The business of insurance in Missouri has grown to such large proportions that the Insurance Department takes rank as one of the important departments of the State Government, and one of the chief revenue producers of the State. Under the law, one-half of the sum derived from the tax on insurance premiums received by insurance companies in Missouri, is distributed by the State treasurer to the revenue fund of the city of St. Louis and the various counties of the State.

The Missouri reciprocal law.



Large revenue turned into the State.

IN YARD OF OZARK LAND AND LUMBER COMPANY, WINONA.

More detailed accounts of the manufacturing and commercial interests of the large cities may be found in another chapter. Sufficient is here said, however, to show the potential supremacy of Missouri along lines of industrial activity.



PERRY COUNTY LUMBER CAMP.



## MINING

**M**ISSOURI'S mineral output to the close of 1903, conservatively estimated, amounts to the enormous sum of \$675,000,000.

The coal fields of the State cover, approximately 25,000 square miles and have produced coal sold at more than \$100,000,000. A two-foot seam of coal for 25,000 square miles, at \$1.25 a ton, the average price for fifteen years at Missouri mines, would aggregate the almost inconceivable amount of \$50,000,000,000, yet in many Missouri coal fields the seams are three or four feet thick or thicker. In numerous cases there are two or more beds.

Iron ore, aggregating in value over \$35,000,000 has been produced and large deposits remain untouched.

The clay deposits are everywhere varied and valuable, exceeding in importance any other source of the State's material wealth.

The deposits of high grade brick clays, fire clays, kaolin, sewer pipe, terra cotta and potter's clays are, as yet practically untouched.

Building stones are as varied and inexhaustible as the clays, granite, limestone, sandstone and marble, occurring in many parts of the State in unlimited quantities and of excellent quality.

Lead ore is found in nearly every county in the south and central parts of the State. Four billion pounds of lead, valued at considerably over \$100,000,000 have been produced, one-half within the last fifteen years.

Zinc ore is mined in commercial quantities in fifteen counties, nearly all of which are also producers of lead. Missouri furnishes 80 per cent of the zinc produced in the United States.

In Missouri are also great deposits of the purest plate-glass sands; quantities of nickle and cobalt ore—in the dump at one mine lies \$600,000 worth waiting milling; large variety of mineral waters; asphalt and asphaltic gravel; road metal and road materials; the world's largest tripoli deposit; copper and

Missouri's mineral output nearly seven hundred million dollars.

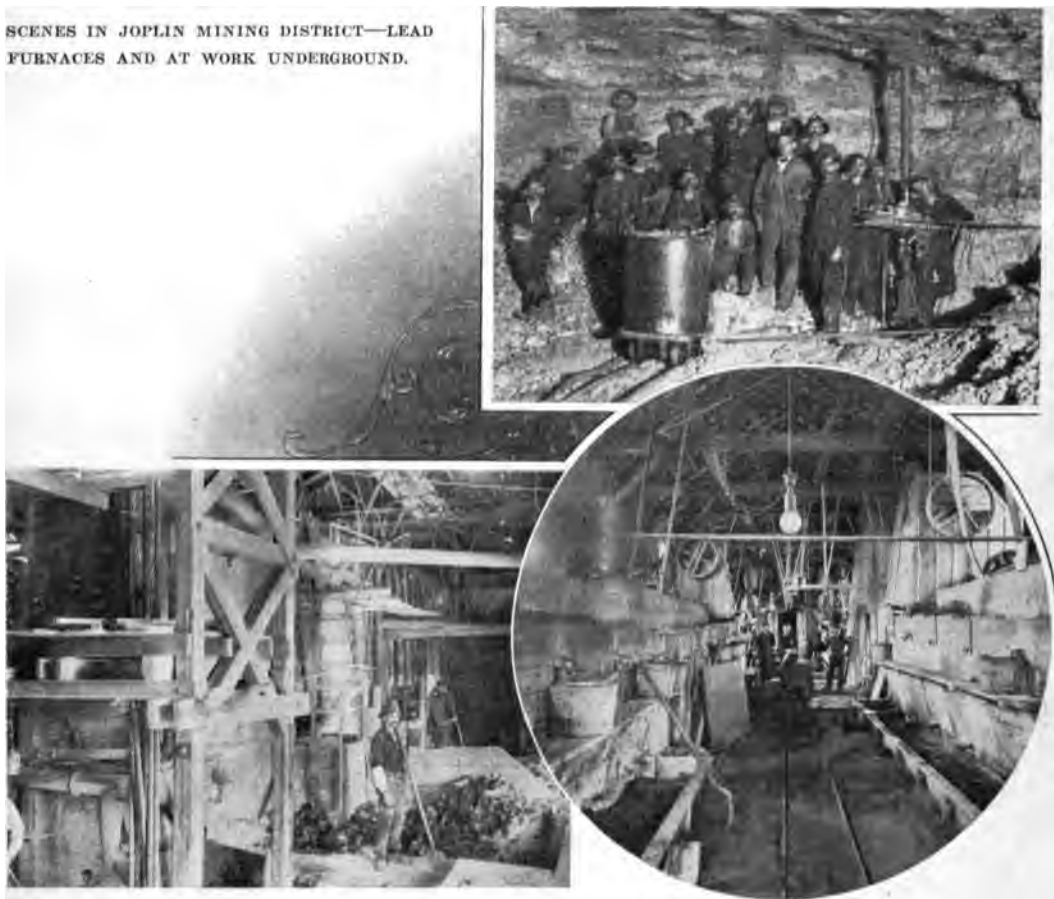
Fifty billion dollars worth of coal undeveloped.

Clay deposits, yet untouched, of inexhaustible value.

Lead and zinc ore in great quantity.



SCENES IN JOPLIN MINING DISTRICT—LEAD  
FURNACES AND AT WORK UNDERGROUND.



extensive barite deposits, the latter a minor product which has yielded \$2,000,000 in southeast Missouri.

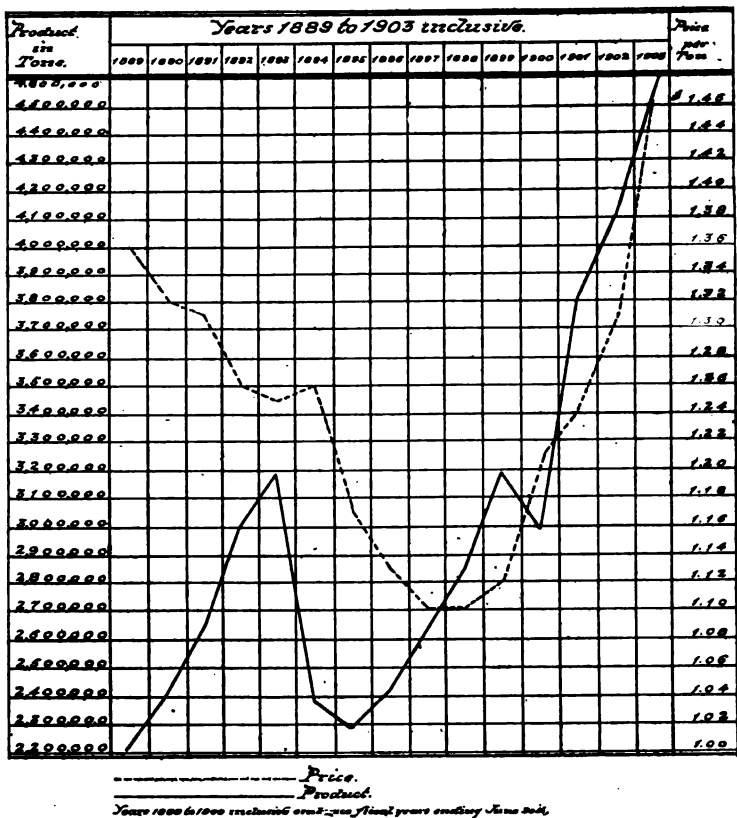
Added to these great mineral resources Missouri has inexhaustible supplies of the purest lime rock and material suitable for the manufacture of hydraulic cement. The cement factories being constructed in Missouri are the greatest in the world.

There has been fulfilled the remarkable prophecy of the explorer and scientist, Henry R. Schoolcraft, made in 1819: "There should be a mineralogical school located in the mine country (Missouri).....Any one who is cognizant of the advantages which various parts of Germany and particularly Saxony, have derived from such a school, will not deny the utility of a similar one in the United States, and as to its location there can be no question, for, compared with any other part of the Union this will be found the *land of ores—the country of minerals*. The earth has not been penetrated over eighty feet. There is reason to believe that the main bodies of ore have not yet been hit. They lie *deeper* and we have thus far only been engaged upon the spurs and detached masses. There is also reason to believe that large bodies of the ores of zinc exist in the district of the mines. Every day is developing to us the vast resources of this country in minerals, particularly in lead, and we can not resist the belief that in riches and extent the mines of Missouri are paralleled by no other mineral district in the world."

Since the publication of Schoolcraft's predictions Missouri has produced far more than \$600,000,000 worth of mineral and her annual mineral product has become greater than that of California.

Schoolcraft's  
remarkable  
prophecy and its  
fulfillment.

Diagram showing the Coal production and the average prices received for all grades at the mines.



Coal production  
and average  
prices.

Coal, the chief reliance in modern times for fuel, is found in exactly one-half of the 114 counties of Missouri. The coal fields underlay nearly 25,000 square miles, more than one-third of the surface of the State. Coal mining,

though extensively carried on, is hardly begun as far as opening up the enormous stores of coal wealth. But 38 counties are now furnishing a commercial output yet coal is found underlying the widely extended surface indicated on the mineral map plate.

One-half the State  
underlaid by coal.

MISSOURI'S COAL HARVEST

YEAR	TONS	PRICE PER TON	VALUE
1889	2,223,477	\$ 1.36	\$ 3,030,414
1890	2,437,399	1.32	3,234,351
1891	2,650,018	1.31	3,480,867
1892	3,017,285	1.26	3,825,828
1893	3,190,442	1.25	3,999,681
1894	2,383,322	1.26	3,013,075
1895	2,283,081	1.17	2,675,690
1896	2,420,147	1.13	2,741,711
1897	2,429,388	1.10	2,684,757
1898	2,838,152	1.10	3,148,862
1899	3,191,811	1.12	3,582,111
1900	2,995,022	1.21	3,643,975
1901	3,813,527	1.24	4,716,331
1902	4,063,572	1.31	5,325,832
1903	4,600,000	1.46	6,716,000
Total	44,536,643	\$ 1.25	\$ 55,819,485

On the assumption that a two-foot seam of coal will produce 2,500 tons of available coal to the acre, and worth \$1.25 per ton at the mine (which is the average price of the past fifteen years) the value of the coal per acre will equal \$3,125, or \$2,000,000 per square mile, or for 25,000 square miles, a sum amounting to \$50,000,000,000. This is an immense value and yet it represents but one bed two feet thick while in

Immense values in  
the coal beds.

fact Missouri has large areas where the coal beds measure three, four and five feet in thickness.

Location and use of  
Missouri coal.

The coals of Missouri are bituminous, except in the case of numerous pocket deposits which are largely composed of cannel coal. The latter are found in Cole, Cooper, Miller and Morgan counties. Some of these coal pockets reach a thickness of ninety feet, and many range from forty to seventy-five feet in thickness; but the area which they cover is small. The crevices in the cannel coal are usually filled with "sheet" lead and zinc ores and frequently, one or the other of these ores occurs in considerable quantity.

Missouri coal is used almost exclusively for the generation of steam and for domestic purposes. But little has been used in the making of gas, or coke. The railroads consume, as fuel for locomotives, the greater part of the coal output and manufactories are second to them in amount of consumption. The coal not devoted to these industries is consumed for domestic purposes. The demand for coal as a fuel for stove and furnaces in residences, in place of wood has grown within the past few years and will continue to grow.

Location favorable  
to coal  
production.

Missouri is surrounded on all sides by large coal-producing States, having Illinois on the east, Iowa on the north, Kansas on the west, and Arkansas



IN A CARTHAGE STONE QUARRY.

on the south, with their coal fields close to our borders. This practically confines, at the present time, the sale of our coal to the home market. We can justly infer from this fact, however, a rapid improvement in industrial conditions within the State, for we produced 536,428 more tons of coal in 1903 than in 1902, and there was an increase in value of the product of \$1,390,168, or over 26 per cent.

Coal fields easily  
worked.

The coal fields of Missouri are not located in rough or mountainous regions, but lie on elevated plains having a gently undulating surface covered with fertile soil, much of which is in a high state of cultivation. The whole area is thickly settled and supports many thriving towns and villages which are closely connected with the mines by a net work of railways penetrating the coal fields in all directions. There is always a considerable local demand for coal, and there are, therefore, many small operators who work their mines only during the winter season.

The organization of large companies to control extensive bodies of coal lands is occurring more frequently with each succeeding year. There is, at present, however, opportunity for excellent investments in coal lands in Missouri, and there is perhaps promise of better and surer returns from such investments than in any mining proposition open to the public. The cost of "coal rights" which give possession of the coal and authority to sink shafts, erect

buildings and to construct and operate rail or other roads, on the surface, together with all privileges necessary for the transaction of a coal mining business, varies in Missouri from \$8 to \$15 per acre, where the coal runs between three and four feet in thickness.

Referring to the diagram and statistical table, it should be stated that the Missouri coal trade did not begin with 1889; statistics have been given only for the period between 1889 and 1903, because prior to 1889 the work of gathering statistics was not systematically done. The price (\$1.36 per ton at the mine) received in this State fifteen years ago for coal was better than since realized, except for 1903, when it reached the record-breaking sum of \$1.46 per ton.

The value of the Missouri coal product for 1889, was \$3,030,414; for 1895, \$2,675,690; for 1902, \$5,325,832; and for 1903, \$6,716,000. This shows an in-

Statistics regarding the Missouri coal trade.



FIG LEAD SMELTERS AT HERCULANEUM, JEFFERSON COUNTY.

crease over 1889, of \$3,685,586, or 121.62 per cent; over the year 1895, of \$4,040,310, or 151 per cent; and over 1902, of \$1,390,168, or 26.10 per cent. The future promises even better results than the year just closed; first, because of the number of new mines which have been opened, their great capacity and splendid equipment, and the excellent quality of coal and thick beds, in newly developed fields; second, because in years past, no such perfect understanding has existed between employer and employe, as is found at present, there having been but one strike in 1903, among the coal miners of the State. The coal mines of Missouri are in fine condition viewed from any standpoint, especially those of safety, sanitation and equipment, and so far as mine accidents are concerned, no State can show a better record.

The earliest mining in Missouri was for lead. M. La Motte discovered the

Future of the coal industry in Missouri.



Lead mining the oldest in the State.

Lead and zinc associated.

Varieties of zinc and lead ore commonly found.

lead deposits in southeast Missouri in 1720 which bear his name, and which have been since worked almost continuously. In 1869 the diamond drill was first used in southeast Missouri by the St. Joseph Lead Company with the result that large bodies of disseminated ores were discovered at the depth of about 120 feet and underground mining proper was begun. In the same year as the result of the establishment in St. Louis of zinc works, zinc ores became valuable.

The ores of lead and zinc are almost invariably found associated except in the southeastern district, where the ores are generally lead, and where zinc is rarely found in commercial quantities. Three prominent districts are found in the State. The southwestern district, including the southwestern corner of the State, has an area of about 125 by 75 miles. The second district is south and west of St. Louis, and includes a territory of about 80 by 85 miles. The third district is the central part of the State, south and west of Jefferson City, with an area of about 75 by 85 miles.

The ores of zinc are sphalerite, or zinc sulphide, locally called "jack," "rosin jack," "black jack" and "blende;" smithsonite, or zinc carbonate, locally

called "zinc drybone" and "carbonate;" calamine, or zinc silicate, locally called "silicate;" and hydro-zincite, or hydrous zinc silicate, not found commercially.

Of the lead ores, there are found galena, or lead sulphide, locally called "blue mineral;" or lead cerussite, or lead carbonate, locally called "drybone" or "carbonate;" pyromorphite, or lead phosphate, sometimes called "green lead;" and anglesite, or lead sulphate. Of these lead ores, galena is the main source of the metal in all the districts. Cerussite was much more abundant than galena in the early days of lead mining in Missouri, because it is secondary ore, and is always found near the surface. Pyro-

LEAD PRODUCTION

YEAR	TONS	PRICE PER TON	VALUE
1889	44,321	\$ 44.55	\$ 1,974,500
1890	47,761	45.49	2,172,647
1891	44,281	49.10	2,174,197
1892	49,626	44.21	2,193,965
1893	40,297	39.34	1,585,569
1894	52,003	37.48	1,949,568
1895	61,618	30.06	1,852,400
1896	65,504	30.33	1,987,155
1897	67,404	27.62	1,862,122
1898	73,687	40.86	3,011,055
1899	70,829	44.10	3,146,237
1900	80,478	46.30	3,726,202
1901	109,842	44.15	4,849,595
1902	126,831	42.01	5,367,065
1903	142,547	49.12	7,002,936
Total	1,077,029		\$44,855,213

morphite and anglesite are of rare occurrence, and are of no commercial value.

The zinc ores are relatively hard and light, having an average hardness of about 4.5, and an average specific gravity of about 4 while the lead ores are relatively soft and heavy, having an average hardness of about 3 and an average specific gravity of about 6.5.

These ores are always associated in the ore-body with other minerals, which are usually called the gangue. These are as follows: Calcite, or lime carbonate, locally called "tiff;" dolomite, or magnesian lime carbonate, locally called "mundic," and white iron pyrites; pyrite, or iron bisulphide; chalcopyrite, a copper and iron bisulphide usually found in small tetrahedrons; chert, an impure flint; jasperite, a secondary deposit of dark silicious material occasionally cementing the ores and gangue; greenockite, or cadmium sulphide; tal-low clay, sometimes called "gouge;" limonite, or hydrated sesqui-oxide of iron; and bitumen, or mineral pitch.

Association of lead  
and zinc ores.

These ores occur in four different ways. First, as "float" or "drop" mineral, on or near the surface—rounded or water-worn, weathered chunks of ore which have originated from broken down crevices in superincumbent beds, or have been segregated by the action of running water. Second, as disseminated ore. Here the ore, usually galena, occurs in fine grains, or minute crystals, disseminated in masses, or beds, generally more or less intimately mixed with

Four different  
formations.



CARTERVILLE, JASPER COUNTY, MINING VIEW.

dolomitic grains, often called "spar" rock. This is characteristic of the south-eastern disseminated lead district. Third, segregated ore. In the upper portion of crevices, or veins, the ores and gangue are more or less disturbed from their original position, and are frequently mixed with residual clays, the "tal-low" clay of the miners. Here the softer rock, usually lime, of the ore-body has been washed away by subterranean drainage, and the ores and gangues, mixed with the broken down wall-rock and insoluble cherts form a brecciated mass irregularly mixed together and the ore is concentrated. Fourth, the crevice, or ore-body proper. Here the wall-rocks are more or less well defined, particularly in the magnesian limestone, though they are frequently broken into irregular, more or less horizontal flat openings, where the ore and gangue have penetrated for some distance. In this case the ore-body is more massive and solid, more or less completely filling up the shattered crevice. The flat openings are the so-called ore runs, or ore horizons. The crevices are usually vertical, penetrating to unknown depths, and they frequently follow fault lines. They vary in width and thickness in different formations and even in the same

How lead and zinc  
are located.

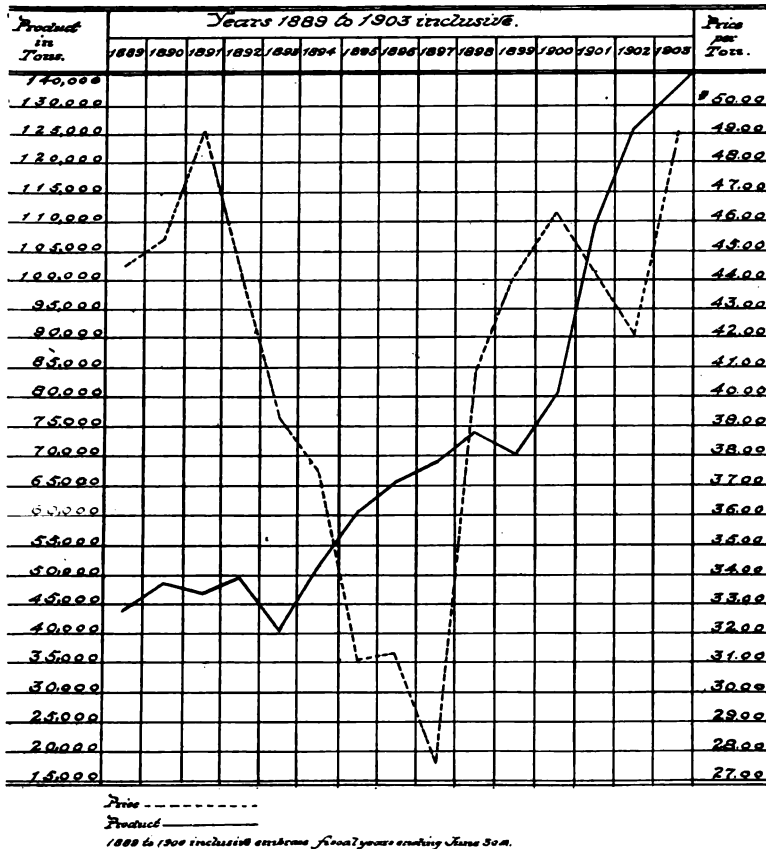
formation. The trend of these crevices, or veins, is usually more or less parallel with folds of the strata.

Commercial  
production of  
lead in Missouri.

The commercial production of lead in extensive quantities in Missouri dates practically only to 1870. From 1870 to 1889 the production grew, averaging for the twenty years an annual output of 29,131 tons; from 1889 to 1903, a period of fifteen years—shown graphically on the accompanying tables:

Diagram showing the production of Lead Ores and the average prices received for all grades of the same.

Prices received for  
the annual  
output.



Constant and rapid  
increase.

The output of lead, except for the years 1891 and 1893, showed a constant and rapid increase until the maximum was reached in 1903. There was an out-



MINING DISTRICT, WEBB CITY.

put in that year of 142,547 tons, valued at \$7,002,936. During the last 15 years Missouri's production of lead exceeded that of the preceding 169 years by over 150,000 tons. The total production of Missouri lead mines to December 31, 1903, amounts to over 2,000,000 tons, valued at over \$111,000,000. The product for the last 15 years has sold for over \$50,000,000. These figures emphasize in a striking way the real growth of Missouri's lead industry.

Southeast Missouri mines 81.05 per cent of the lead ore product of the State; with one county in that district, St. Francois, producing 90 per cent of the district's total. There is located at Bonne Terre, the St. Joseph Lead Company, the largest lead-ore producing company in the world. This

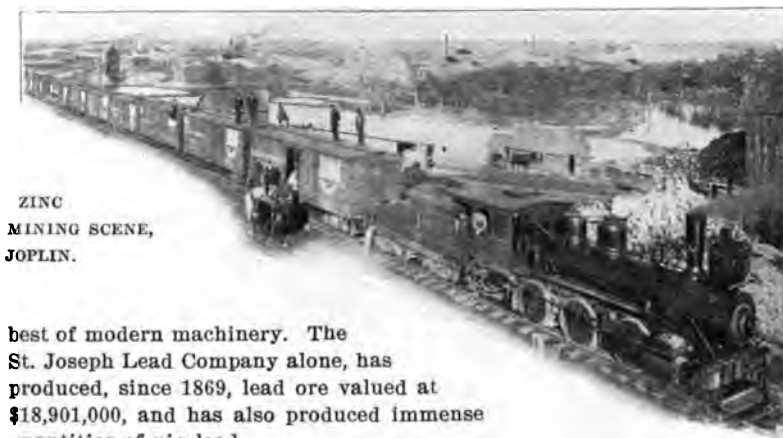
company owns the finest concentrating mill yet erected. It has concentrating plants of great capacity at Bonne Terre, Flat River and other points, and large smelting works at Herculaneum. It covers and operates a standard gauge railroad 50 miles long. Among other large producers in this district are the Desloge Consolidated Lead Company, the St. Louis Smelting and Refining Company, the Central Lead Company, the Doe Run Lead Company, the Federal Lead Company, the Columbia Lead Company, and several new concerns which have not yet completed their plants. The companies named mined ninety per cent of all the lead product for 1903 in the eastern Missouri district. Each one of these companies owns the fee to very large tracts of land, which have been developed by the diamond drill, and each of them possesses plants which are equipped with the



IN AN ADAIR COUNTY COAL MINE.

Figures showing Missouri's production of lead.

Where the lead in Missouri is mined.



ZINC MINING SCENE, JOPLIN.

best of modern machinery. The St. Joseph Lead Company alone, has produced, since 1869, lead ore valued at \$18,901,000, and has also produced immense quantities of pig lead.

In Madison county are the Catharine Lead Company and the North American Lead Company, new and with fine plants, working the disseminated lead ore bodies on a large scale and mining nickel, cobalt and copper. The Mine La Motte property, under new management, has enlarged its milling capacity. This property has been made famous by its output of nickel and cobalt, which, even prior to 1903, was in excess of the entire output of all other States. Under the

Companies with latest machinery for operation.

Four plants doing large business.



new methods employed during the year 1903, a large amount of nickel, cobalt, and copper has been mined, with a total valuation of \$276,400, a sum five times as large as for any former year. The nickel product was worth \$44,000; the cobalt, \$288,000; and the copper ore, \$4,400.

Zinc and lead ores  
mined in  
twenty-two  
counties.

Zinc and lead ores are mined in commercial quantities in twenty-two counties, and of this number seven counties mine lead only. The zinc producing counties in every instance also produce lead, the two ores in many of the mines being closely associated, in fact there are very few zinc mines



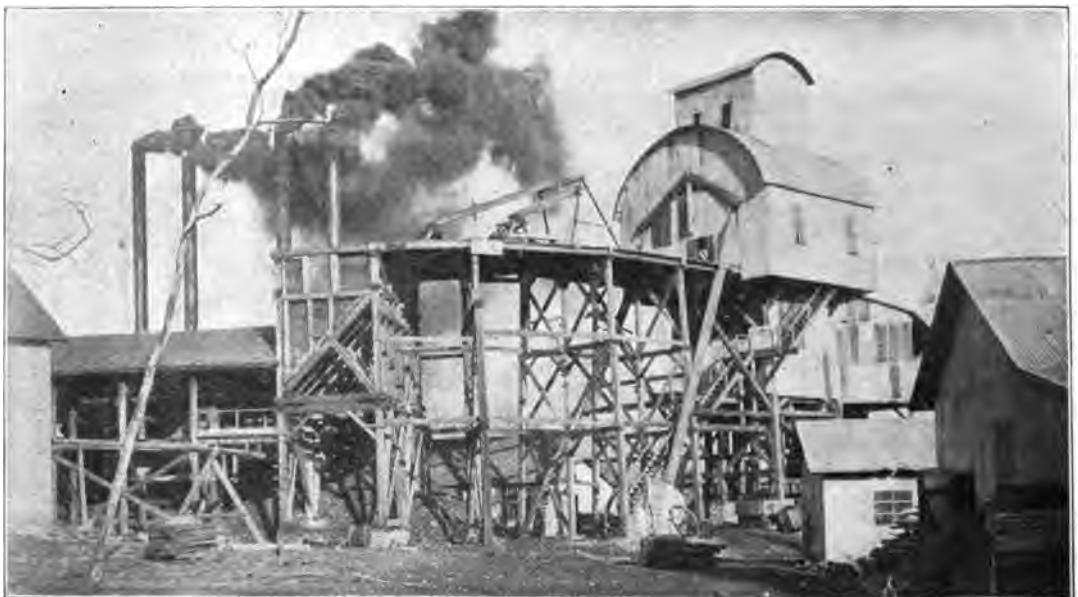
KANSAS & TEXAS COAL COMPANY, MINE NO. 33.

in the State that do not also produce more or less lead. Zinc ores are found in commercial quantities in Jasper, Newton, Lawrence, Jefferson, Greene, Moniteau, Benton, Ozark, Barry, Christian, Morgan, Hickory, Cole, Camden, and Wright counties. These counties are mentioned in the order of their importance as producers. Jefferson and Ozark counties produce silicate and carbonate only.

There are other counties in which zinc ores occur.

Growth of zinc  
mining.

The first record we have of the utilization of zinc ores in this State was the erection of a small smelter at Potosi, Washington county, in 1867. In the western district of this State where such enormous quantities have since been mined, the zinc ore was cast aside as worthless up to 1871. The first recorded output was for the year 1873, when it amounted to nine hundred and sixty tons, and sold for \$9 per ton. With but slight fluctuation the price steadily increased from that time up to 1890, when it reached an average, for all grades, of \$22.51 per ton. After 1890 the prices declined and fell to \$15 per ton. During the fiscal year ending June 30, 1894, this price was lower than it has been since 1877 and is accounted for by the great business depression which prevailed generally dur-

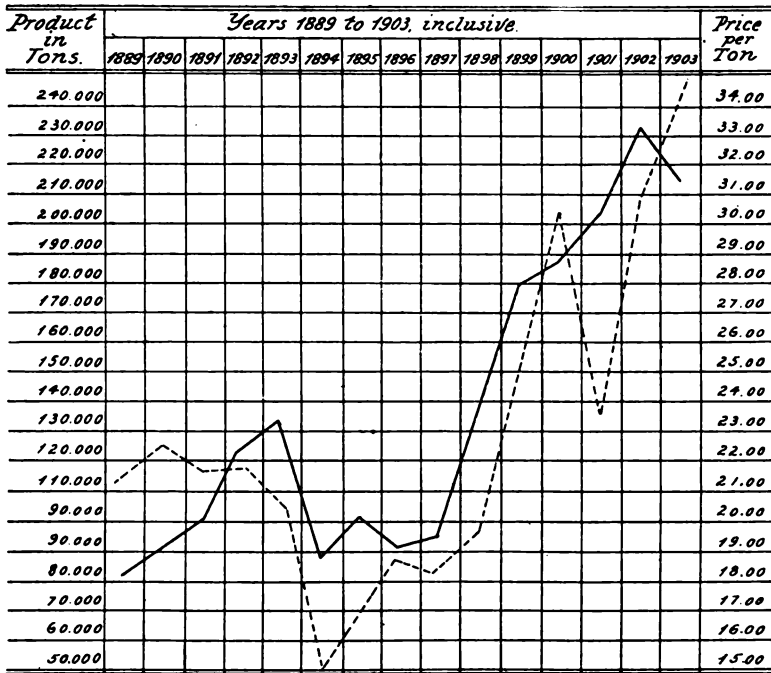


HUNTINGTON SHAFT.

ing that period. From 1894 to 1899 the prices gradually increased until in later years the record breaking price was reached, or \$34.33 per ton. This was followed by decline in prices to \$33.70 for 1903, only a few cents below the highest price it ever reached.

*Diagram showing the production of Zinc Ores and the average prices received from all grades of the same.*

Production of zinc ores and prices received.



----- Price.  
 \_\_\_\_\_ Product.  
 Years 1889 to 1903 inclusive, embrace fiscal years ending June 30<sup>th</sup>

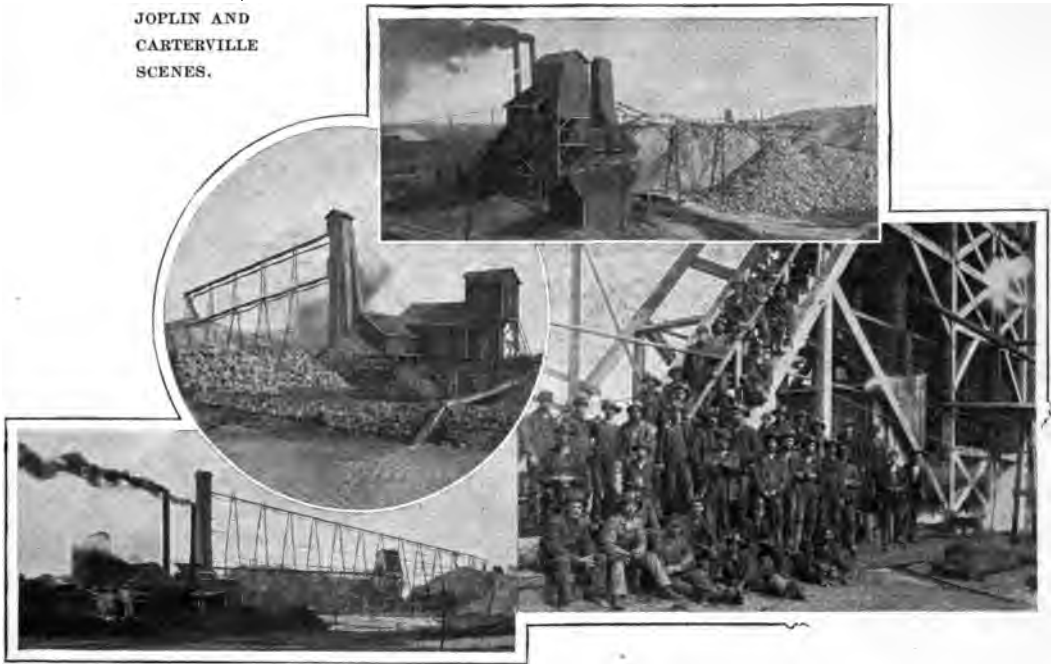
Result of temporary high prices.

The prices given are average prices and embrace those paid for all grades, including the silicates, which bring only about half the amount paid for good "jack." During the year 1899, the price for zinc ore reached the surprising sum of \$52 per ton. This was but temporary, however, although it continued long enough to attract the attention of speculators from all sections of the country, with the result that many "fake" enterprises deceived the uninitiated, and many worthless properties were sold for fabulous sums. The



COAL MINE, PUTNAM COUNTY.

WEBB CITY,  
JOPLIN AND  
CARTERVILLE  
SCENES.



Estimate of zinc  
output of State.

Joplin district suffered for a time as a result of this wild speculation, but the foundation for a great and paying industry was there and stable conditions were soon restored. During 1903 the price of ore reached \$42.50 per ton, but it should be remembered that the highest figures refer to the very highest grade, averaging between \$33 and \$37 per ton for many months during the year. For the year as a whole, the data at hand justifies an estimate of two hundred and twelve thousand two hundred and fifty-seven tons, at \$34, which makes the output worth \$7,216,736. The product of Missouri zinc mines from 1873 to the present, unlike the price received from the ore, has made a continuous increase with but one exception, which naturally followed the great business depression of 1893 and 1894.

ZINC PRODUCTION

YEAR	TONS	PRICE PER TON	VALUE
1889	82,357	\$ 21.44	\$ 1,765,744
1890	100,248	22.51	2,256,582
1891	123,752	21.60	2,673,043
1892	131,488	21.76	2,861,178
1893	108,591	20.57	2,245,028
1894	89,150	15.00	1,337,910
1895	101,294	16.86	1,707,665
1896	92,754	19.75	1,831,856
1897	93,148	18.32	1,706,947
1898	139,668	20.96	2,927,321
1899	181,430	34.33	5,974,624
1900	186,290	30.65	5,711,631
1901	224,074	23.70	5,308,671
1902	234,903	30.84	7,052,819
1903	212,257	34.00	7,216,736
Total	2,101,404	\$ 25.02	\$ 52,577,755

Deeper mines and  
better equipped  
plants.

Although the expenditure of more time and money in development work is necessary, as deeper mining is undertaken and there is the slight added cost of handling more water and hoisting material from greater depths, the cost of producing zinc ore has advanced but little. In fact, the improved methods for handling and cleaning and saving ore which are practiced by the best equipped plants more than offsets the greater cost of working deeper mines. Many tracts of land that were worked

years ago to shallow depths and abandoned as worked out, have been reopened at greater depths, where are found extensive ore bodies which promise much better results than were obtained in the former shallow mines.



LAFAYETTE COUNTY COAL MINE.

Missouri was the first State west of Ohio to produce and smelt iron ore. Iron ores are found in nearly every county in south Missouri and in a few counties north of the Missouri river. They are chiefly confined to the Silurian rocks, probably ninety-five per cent of the six hundred and thirty-six iron ore localities, which have been mapped out in the State, occurring in this formation. Some, however, are found in the lower carboniferous rocks, and some immense deposits (now largely worked out) occurred in the Algonkian rocks and the Archean porphyries of southeast Missouri. A few carbonate and unimportant limonite deposits lie in the coal measures of the extreme west and northwestern portion of the State. The most extensive deposits now known are in Phelps, Crawford, Franklin, Dent, Iron, St. Francois, Bollinger, Wayne, Butler, Ripley, Carter, Oregon, Shannon, Ozark, Howell, Miller, Camden, Morgan, Benton, and St. Clair counties.

Iron ore easily  
mined in  
Missouri.

The total product of the State, to date, is between eight and nine million tons, the leading producing counties having been in the order of importance; St. Francois, with nearly three and three-quarter million tons; Iron, with one and three-quarter million tons; Crawford, with nearly one million tons; and Phelps, with three-quarters of a million tons. Fifty, or nearly half of the counties of the State, have important iron ore deposits.

Where the iron ore  
is found.



RAY COUNTY COAL MINE AND FARM SCENE.



ZINC MINING PLANTS ON MINOR &amp; ROGERS' LAND, AURORA.

Missouri has produced iron ore aggregating \$35,000,000.

Missouri has produced in the neighborhood of \$35,000,000 worth of iron ore, her largest output having been previous to the decline in production at the Iron Mountain and Pilot Knob mines. In 1887 Missouri produced about four hundred and thirty thousand tons of iron ore, but the product gradually diminished until 1900, after which, owing to better prices and an increased demand, the industry has revived in the State, and the annual output is again increasing.

The important ores from which iron is produced in Missouri are hematite and limonite, the former producing about two hundred pounds more iron to the ton than the latter.

The Cherry Valley Mine, in Crawford county, has produced over a half million tons of ore; the Simmons Mountain Mine, in Dent county, over one quarter million tons, and the Meramec Mine, in Phelps county, three hundred and seventy-five thousand tons. The quality of this class of ore is excellent, it is very high in metallic iron and very low in sulphur and phosphorous, and is also easily smelted. In the past two or three years a number of new and important ore bodies have been found, and it may be safely predicted that new discoveries will be made in the years to come, and that in this district, especially in Shannon, Phelps, Dent and Crawford counties, the iron industry will thrive far into the future. A large modern smelter has recently been completed at Sligo, in Dent county, for the smelting of these ores. Charcoal is used for a fuel, and, in burning it, by-products are saved, including large quantities of wood alcohol.

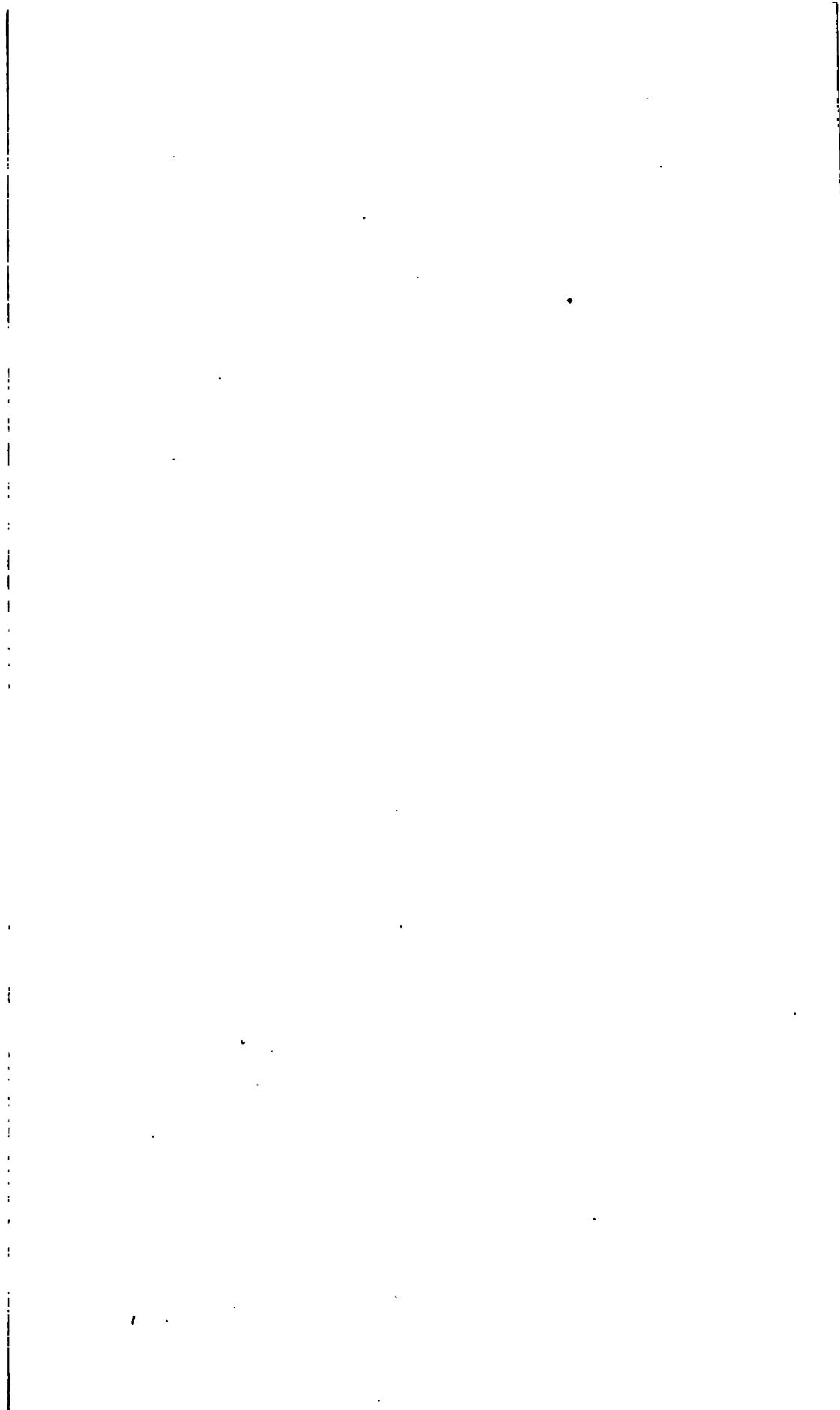
While limonites occur wherever the Silurian limestones, or Cambrian forma-

Character and product of some Missouri iron mines.

Charcoal used for fuel.



CATHERINE LEAD CO., MADISON COUNTY.





ZINC MINING PLANTS ON MINOR &amp; ROGERS' LAND, AURORA.

Missouri has produced iron ore aggregating \$35,000,000.

Missouri has produced in the neighborhood of \$35,000,000 worth of iron ore, her largest output having been previous to the decline in production at the Iron Mountain and Pilot Knob mines. In 1887 Missouri produced about four hundred and thirty thousand tons of iron ore, but the product gradually diminished until 1900, after which, owing to better prices and an increased demand, the industry has revived in the State, and the annual output is again increasing.

The important ores from which iron is produced in Missouri are hematite and limonite, the former producing about two hundred pounds more iron to the ton than the latter.

The Cherry Valley Mine, in Crawford county, has produced over a half million tons of ore; the Simmons Mountain Mine, in Dent county, over one quarter million tons, and the Meramec Mine, in Phelps county, three hundred and seventy-five thousand tons. The quality of this class of ore is excellent, it is very high in metallic iron and very low in sulphur and phosphorous, and is also easily smelted. In the past two or three years a number of new and important ore bodies have been found, and it may be safely predicted that new discoveries will be made in the years to come, and that in this district, especially in Shannon, Phelps, Dent and Crawford counties, the iron industry will thrive far into the future. A large modern smelter has recently been completed at Sligo, in Dent county, for the smelting of these ores. Charcoal is used for a fuel, and, in burning it, by-products are saved, including large quantities of wood alcohol.

While limonites occur wherever the Silurian limestones, or Cambrian forma-

Character and product of some Missouri iron mines.

Charcoal used for fuel.

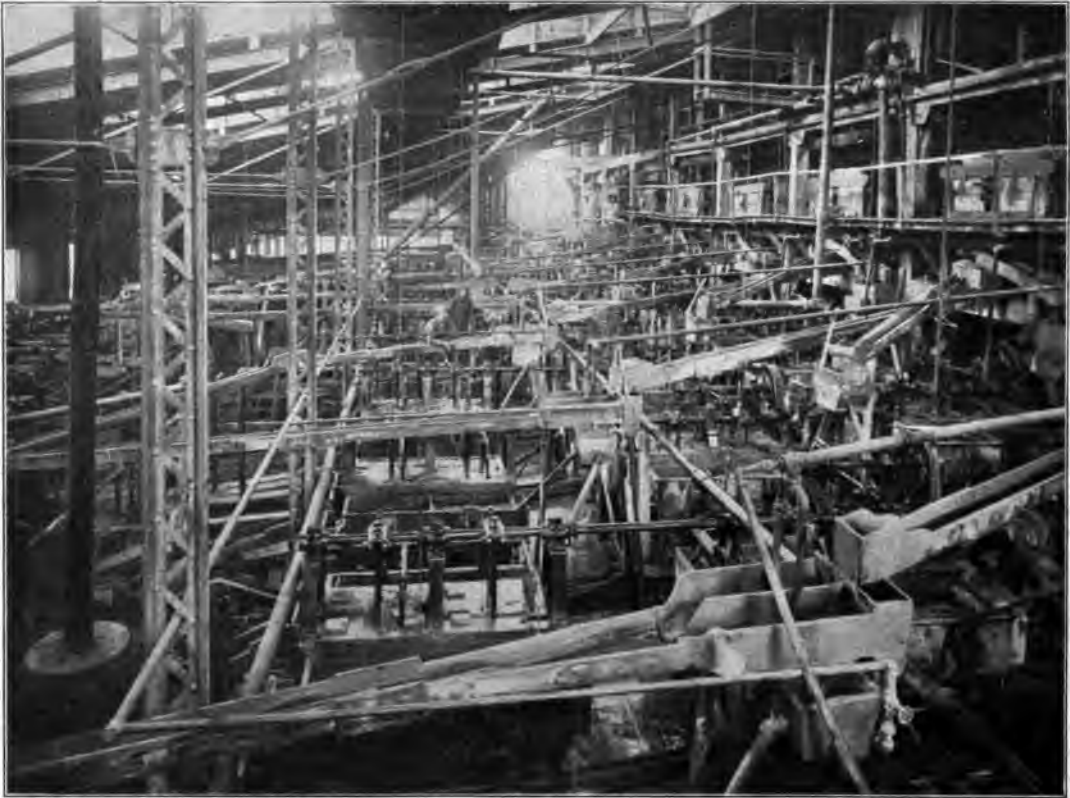


CATHERINE LEAD CO., MADISON COUNTY.









JIG ROOM, CONSOLIDATED LEAD COMPANY, DESLOGE, ST. FRANCOIS COUNTY.

tions, exist in the State, and to some extent in the younger formations, they are principally distributed along the southeastern slope of the Ozarks and on the western slope, up the valley of the Osage river and its tributaries. The limonite ores of Missouri, even the more silicious ones, carry a higher percentage of iron than the red hematite ores of Alabama, or the limonites of Pennsylvania. Many of them are comparatively free from phosphorus, and it is possible that large bodies will be found sufficiently free from this element to render the ore useful for Bessemer processes.

Higher percentage of iron ore than the limonites of Pennsylvania.

The red hematite ores of Missouri occur as distinct beds in the coal measure and Lower Carboniferous rocks, and, unlike the other iron ores of the State, their geological age is definitely fixed. Inaccessibility and comparative cost of mining have hindered the production of these ores, but with the extension of railroads, many of the red hematite deposits of the State will become extremely valuable.



DOE RUN LEAD COMPANY,  
FLAT RIVER, ST. FRANCOIS COUNTY.

Pilot Knob and  
Iron Mountain.



First furnace  
erected in the  
State.

IN A MORGAN  
COUNTY COAL MINE;  
HUBBARD & MOORE.

ore in 1836, but mining was only begun in 1844, after the property had changed hands several times. The first smelting was done in 1846. Local smelting was continued until the year 1877, at which time over one hundred and ninety-two thousand tons of pig iron had been produced. After this date the ore was shipped to other points for smelting. Two classes of ore occur here: first, vein deposits, the largest of which originally had a maximum thickness at the surface of sixty feet or more, but which rapidly narrow in depth, and ultimately divide into two separate veins, varying in width from twelve to

Specular ores of the porphyry district occur principally at Iron Mountain and Pilot Knob, and in their immediate vicinity. The Pilot Knob district has produced nearly two million tons of ore, the Iron Mountain, over three and one half million tons. At both of these points the richer ores have apparently been exhausted, and only "clean up" work is at present in progress. It is claimed that by recent drill work, the main veins have been discovered at small distances from the point where they were lost or thinned out in the original workings. If this is true Missouri can expect in the immediate future to regain her prominence as an iron producing State, but the assertion must at present be looked upon with grave doubt.

In 1815 the first iron furnace was erected in the State at a point near Ironton, where ores from Shepard Mountain, a short distance from Pilot Knob, were used. The ore from Pilot Knob proper was first mined in 1835. The Pilot Knob ores are fine grained and massive with often slated structure. They are very low in phosphorous and in general make a high grade Bessemer product; but with rich and pure ore there is also associated a great deal of lean and impure material.

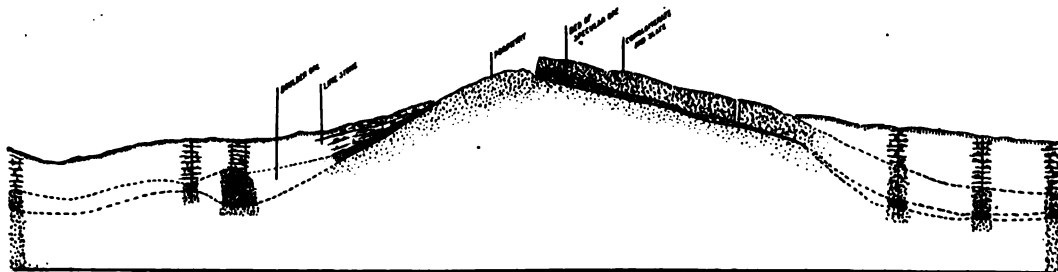
The cross-section, made by Prof. W. B. Potter, shows in a graphic way, the manner in which the ore occurs.

Iron Mountain came into the possession of a company organized for the purpose of mining iron ore in 1836, but mining was only begun in 1844, after the property had changed hands several times. The first smelting was done in 1846.

History of Iron  
Mountain.



LIVINGSTONE MINE, ZINC ON WAGON, HOWELL COUNTY.



A cross-section through Pilot Knob.



ZINC MINING SCENE, LAWRENCE COUNTY.

eighteen feet. This ore is comparatively high in phosphorous. Second, the bowlder or conglomerate ore, which is similar in origin to the bowlder formations at Pilot Knob. These latter ores are comparatively (sometimes wholly) free from phosphorous.

Traces of silver are found in most of the lead ores of southeast Missouri, in some localities in paying quantities. The Einstein Silver Mine, on the St. Francis river, in Madison county, has thus far been the only producer.

Gold has been occasionally found as a placer deposit, in the glacial drift of northern Missouri, while traces of this metal occur in some of the silver-lead ores of Madison county.

The copper ores are widely distributed in the southern half of the State. In the zinc mines of southwest Missouri chalcopyrite crystals are abundant, but not sufficiently so to be commercially important as an ore. Copper mines have been opened in Shannon, Ste. Genevieve, Phelps and Franklin counties, but up to the present time, not more than twenty thousand dollars worth of ore has been produced.

Manganese ore occurs in southeast Missouri, principally in Iron, Wayne, and Madison counties.

Nickel and cobalt occur associated with the lead ores of southeast Missouri, and are especially abundant on the Mine La Motte tract, in Madison county. Several hundred thousand dollars worth of nickel and cobalt ore is now lying on the "dump" at this place, awaiting treatment at the new refinery, which will be in operation in the spring of 1904. This will be the only

Silver and gold  
found in  
Missouri.

Copper and  
manganese found  
in small  
quantities.



ALPHA MINE, ONLY GOLD MINE IN THE STATE.

Nickel and cobalt  
among  
Missouri's  
mineral  
resources.



MACON COUNTY COAL MINE.

plant in the United States for the refining of nickel and cobalt ores, the production of which will become an important industry in Missouri in the immediate future.

Pure lime rock is found in almost every section of the

State, and Missouri is one of the greatest lime producers in the Union. At various points, suitable shales are associated with pure limestone, so that the best materials are at hand for the manufacture of Portland cement, and the industry is becoming a very large one in the State. Immense cement manufacturing plants have been erected at Hannibal and Louisiana.

Immense cement manufacturing plants.

Plate glass of the best quality has been manufactured for many years on a very large scale at St. Louis and Crystal City, and a new plant has been recently established near Valley Park, on the Frisco railroad. A very pure silica is obtained for the plate glass industry from a lower Silurian sandstone, the supply coming mostly from Pacific and Crystal City.

Missouri leads all States in the production of barite.

Missouri leads all other States in the production of barite, the output for 1902 amounting to 36,602,790 pounds. Washington county is the largest producer, while large amounts are annually mined in Jefferson, Franklin, St. Francois, Miller, and Morgan counties. It is used chiefly in the manufacture of paint.

A material, commercially known as tripoli, which probably results from the decomposition of beds of chert, occurs at several points in the State, and is very extensively quarried at Seneca, in Newton county. The bed of tripoli at Seneca is from 80 to 100 acres in extent, and varies in thickness from 10 to 25 feet. The material is ground in immense quantities into a flour, which is used as a polishing powder. Over 20,000,000 pounds of it are produced annually. It is also largely manufactured into blotters and filters. In its production Missouri leads all other States. The tripoli bed at Seneca is the largest in the world.

Ahead of the world in tripoli.

Gravels and mortar sands are abundant in the State and are widely used.

Trap rocks of the best quality for road macadam occur in southeast Missouri, but have not as yet been utilized.



WHITE LIMESTONE QUARRY, CARTHAGE.



BIRD'S EYE VIEW OF SENECA, NEWTON COUNTY.

Missouri has a great variety and inexhaustible quantity of clays. They have been utilized for many years, in many ways. Structural and ornamental brick of the highest grade are produced on a vast scale. The finest quality of terra cotta, great quantities of sewer pipe, paving brick, roofing and drain tile, pottery, fire brick and a general line of refractory materials are manufactured at various points in the State, while ball clays and kaolins for porcelain manufacture and a variety of fire clays are mined in large quantities and shipped away in the raw state.

Missouri ranks  
foremost in clays.

Brick clays occur in the meadows and river bottoms all over Missouri, and are especially abundant over the plains of the northern and western portions of the State. The most important brick clay, however, is known as the loess, a sedimentary deposit, which rests upon the bluffs of the Mississippi and Missouri rivers and their tributaries. It extends back from the rivers for a distance of ten or twelve miles, and varies in thickness from 10 to 50 feet. It is a yellowish, porous clay, very resistant to the weathering forces of nature, easily worked, and adapted to the manufacture of both common building brick, and the finest grades of ornamental brick. It is utilized most extensively in St. Louis, Kansas City, and St. Joseph, where millions of brick are made from it each year. There are nearly four hundred brick yards in the State which produce from three and a half to four million dollars worth annually.

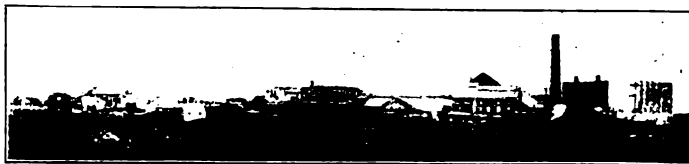
Brick clays of  
finest quality.

For the manufacture of sewer pipes in Missouri, inferior grades of fire clay are used, mixed with brick clays and shales, the latter as well as the fire clays occurring in inexhaustible quantities in the measures. The sewer pipe industry is second only in importance to the building brick. Most of the sewer pipe is made in St. Louis, although considerable quantities are produced in Kansas City, in Henry county, and nearby. The annual product is valued at from one to one and one-quarter million dollars.

Sewer pipe made  
extensively.



DOE RUN LEAD COMPANY CONCENTRATING MILLS. CAPACITY 750 TONS DAILY.



WHITE LEAD WORKS, JOPLIN, LARGEST IN THE UNITED STATES.

Missouri has long been noted for its high grade refractory materials produced from the fire clays occurring in the coal measure outlayer of St. Louis county and city, in the coal measure deposits of north central Missouri, and in innumerable pockets in the limestone and sandstone formations in the central-eastern portion of the State. Extensive and thick beds of excellent fire clay occur and are worked in Callaway and Audrain counties, but the best known fire clays of the State are those of St. Louis, where they are carefully treated, exposed to the influence of weather for years, washed, and finally made into glass house-pots, and such articles as can only be produced from the finest quality of fire clay, where the elements of strength and durability are as important as the refractory property. The coal measure clays are plastic, while the pocket varieties which are worked extensively along the Wabash and Frisco railroads, are non-plastic and are known as flint clays. The annual value of the fire clay products of the State is approximately one million dollars. The paving brick clays, which are more properly called shales, occur mostly in the coal measures, and are found in inexhaustible quantities in the northern half of the State, and practically along its whole western border.

Paving brick have been produced in the State for the last fifteen years. The annual product is valued at about four million dollars.

Clay suitable for the manufacture of pottery is found in abundance in many parts of the State. Shales are to some extent employed, and many impure fire clays. They carry a comparatively high per cent of fluxing impurities. For the better grades of ware, those free from iron are selected. The industry is not as large as it should be, and there remain splendid opportunities for its development. The value of the annual product is not far from \$200,000.

Kaolins, or clays which rank commercially as kaolins owing to their freedom from iron, are confined mostly to the southern and especially to the southeastern portion of the State. They occur abundantly in pockets in the limestone rocks. Their production is confined almost wholly to Johnson and Bollinger counties. The product is mostly shipped out of the State. It is probable that with more careful methods of sorting and handling this clay, the demand for it will increase, and that the industry will become a larger one in the future.

The terra cotta industry depends for success upon artistic skill and ability to mix and handle clays, in order to mould, dry and burn the large and elegant

Rich beds of fine  
clays.

Pottery clays in  
abundance.

Kaolins frequently  
found.



LEAD SMELTERS AT HERCULANEUM, JEFFERSON COUNTY.



CARBONATE OF ZINC MINE  
NEAR WEST PLAINS.

pieces which in recent years have been produced in St. Louis for structural and ornamental purposes.

The tile and flower pot industries are scattered over the State, the drain tile plants being chiefly confined to the northern portion, while the roofing tile are manufactured only in St. Louis. Altogether the annual output of these products will not exceed \$150,000 in value.

Tile and flower  
industries.

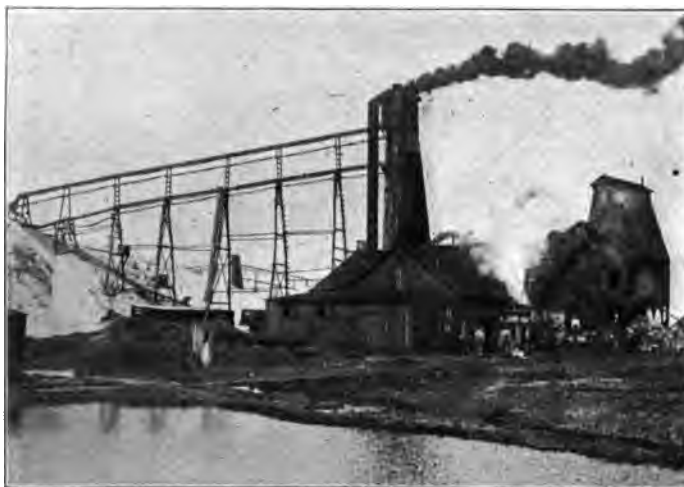
In former years immense quantities of surface clay, known as "gumbo" has been burned for ballast along the railroads crossing the prairies of the northern portion of the State. In some years, the product has been valued at over one million dollars.

Gumbo valued  
a million do

The clay industries of the State are in a flourishing condition, the annual output ranging from eight to ten million dollars.

Missouri is no less well supplied with building stones than with clays. They are found in every section of the State. In the coal measures, in the north and west limestones and sandstones are omnipresent, and there are several beds of marble of good color and susceptible of a high polish. The limestones and sandstones are worked locally in all sections of this district, and the limestones are extensively quarried in Jackson and Buchanan counties, while in Johnson county and Warrensburg, a number of large quarries have been operated for many years in the massive beds of brown sandstones which occur there. In the lower carboniferous formation, which extends from Clark county, in the northeast, to McDonald, in the southwest, and along its southeastern extension through Lincoln, St. Charles, and St. Louis into Ste. Genevieve counties, immense quantities of high grade limestone are quarried. It is durable and much of it readily submits to fine tool work and carving, and it takes a good polish. The beds vary in color from white to drab, and many of them are filled with fossils, which add much to the attractiveness of the stone when polished. Immense quantities of these limestones are quarried in the city of St. Louis, for foundations, buildings, curbs, paving stones, etc., while at Carthage, in southwest Missouri, they are quarried on a large scale for high grade structural work, monuments, etc. The Jasper county court house, at Carthage, built of Carthage limestone, is one of the handsomest stone buildings in the west.

Building stone  
every section  
the State.



MYRTLE D. MINE, CARTEVILLE, JASPER COUNTY.



## THE STATE OF MISSOURI.

## COUNTIES PRODUCING COAL, LEAD AND ZINC DURING THE YEAR 1902, OUTPUT OF EACH AND VALUE OF SAME.

COUNTIES	TONS OF ZINC ORE MINED	AMOUNT REC'D FOR ZINC PRODUCT	TONS OF COAL MINED	AMOUNT REC'D FOR COAL PRODUCT	TONS OF LEAD ORE MINED	AMOUNT REC'D FOR LEAD ORE	TOTAL REC'D FOR COAL, LEAD AND ZINC
Adair			312,403	\$ 384,926			\$ 384,926
Audrain			33,435	52,467			52,467
Barry	115	\$ 1,610					1,610
Barton			200,433	238,308			238,308
Bates			359,061	381,508			381,508
Benton	800	21,600			272	\$ 13,290	34,890
Boone			23,609	36,307			36,307
Caldwell			11,853	19,902			19,902
Callaway			24,483	40,660			40,660
Camden					85	3,825	3,825
Carroll			1,985	3,670			3,670
Cass			1,350	3,037			3,037
Cedar			3,107	4,602			4,602
Chariton			2,025	3,592			3,592
Christian					180	8,100	8,100
Clay			8,052	13,688			13,688
Cole			1,045	1,822	107	4,708	6,530
Cooper			945	2,170			2,170
Crawford					172	7,908	7,908
Dade	150	4,200	5,180	7,453	90	4,140	15,793
Franklin					1,309	63,403	63,403
Greene	1,444	42,874			342	15,500	58,374
Grundy			34,936	63,232			63,232
Henry			91,616	149,718			149,718
Hickory	21	546			43	1,892	2,438
Howard			4,350	9,050			9,050
Jasper	193,351	5,997,029			23,253	1,045,720	7,042,749
Jackson			21,000	52,500			52,500
Jefferson	2,023	26,299			750	36,888	63,187
Johnson			539,612	16,517			16,517
Lafayette			8,500	920,479			920,479
Lawrence	14,323	420,300			460	21,066	441,366
Linn			79,221	139,440			139,440
Livingstone			800	1,400			1,400
Macon			1,198,133	1,330,107			1,330,107
Madison					3,881	* 176,970	225,878
Miller					89	3,782	3,782
Moniteau	832	28,998	143	338	866	44,801	74,137
Monroe			1,980	3,465			3,465
Morgan			446	557	160	7,520	8,077
Montgomery			2,400	4,650			4,650
Newton	21,434	504,763			3,213	144,087	648,850
Nodaway			1,590	4,372			4,372
Ozark	400	4,400					4,400
Putnam			125,543	191,854			191,854
Ralls			20,150	28,355			28,355
Randolph			450,181	526,933			526,933
Ray			280,162	450,633			450,633
St. Clair			3,139	5,663			5,663
St. Francois					88,734	3,592,938	3,592,938
Saline			205	512			512
Schuyler			3,373	4,974			4,974
Vernon			207,126	226,964			226,964
Washington					2,794	120,343	120,343
Wright	10	200			29	1,276	1,476
TOTAL 1902	234,903	\$ 7,052,819	4,063,572	\$ 5,325,832	126,829	\$ 5,367,065	\$ 17,745,716
TOTAL 1903	212,257	7,216,738	4,600,000	6,716,000	142,547	7,002,936	20,935,674
DECREASE	22,646						
INCREASE		163,919	536,428	\$ 1,390,168	15,718	\$ 1,635,871	\$ 3,189,958

\*Nickel and Cobalt product 1902, 48,908. Nickel and Cobalt to be added to above figures for 1903, product valued at \$300,000.



BLACK DIAMOND MINE, BEVIER.

be extensively quarried, but at present are little developed, owing to lack of transportation facilities.

The Silurian limestones vary much in quality in different localities. Sometimes the beds are thin seams and make an excellent flagging and sidewalk material, but more often they are massive. They are generally magnesian, and often silicious and very hard, although they dress well and make handsome building stone. The first story of the new building of the School of Mines, at Rolla, is built of magnesian limestone quarried in Phelps county.

Sandstones are also abundant in this formation, and are extensively used for local purposes, especially for sidewalks, culverts, and foundations.

In southeastern Missouri, the Archean granites and porphyries are quarried on a large scale, the latter for paving stones, and the former for both paving stones and dimension material. The granites occur in Shannon, Reynolds, Wayne, Madison, Iron, Washington, St. Francois, and Ste. Genevieve counties. The quarrying of granite has been confined to outcrops along the lines of the Iron Mountain and Southern and Belmont Branch railroads. These rocks occur in color varying from gray to pink and red; some are fine grained, and some coarse, while all take a high polish and are readily tool worked. Blocks of any desirable size are obtainable. The Allen monument, erected in Pittsfield, Massachusetts, was taken from quarries of the Syenite Granite Company, at Graniteville, Iron county. It is forty-two feet high and four and one-half feet square at the base, and is a single piece of granite. The columns in front of the Studebaker building, in Chicago, ten in number, each eighteen feet high, four and one-half feet in diameter, and weighing about eighteen tons, were quarried and dressed by this company.

The area in which gas, oil, and asphaltum are found is everywhere underlain by the beds of the lower coal measures, the equivalent of the Cherokee shales of the Kansas geological survey. The lower coal measures are here made up of thin alternating beds of shale, sandstone and coal. These beds are extremely irregular, varying decidedly in thickness within short distances, and also frequently changing in composition. Some of the sandstones, especially those near the middle and base of the formation, are saturated with asphaltum and asphaltic oil. The lower coal measures thin out rapidly with asphaltum and finally disappear. This formation rests upon the Mississippian limestone, which dips strongly to the northwest at the rate of 10 to 20 feet to the mile. By reference to the geological map of Missouri, it will be noticed that the lower coal measures enter the State from Kansas in the northwest part of Jasper county. In this geological horizon, and especially within the neighborhood of about 15 to 25 miles from its eastern border, will probably be found the most profitable deposits of asphalt oil and asphaltum. Farther to the west, within certain

Limestones,  
sandstones and  
marbles.

Paving stones and  
dimension  
material.

Gas, oil and  
asphaltum.



CLAY MINING AND MANUFACTURE, BROOKFIELD, LINN COUNTY.

Where natural gas  
may be found.



JOHNSON'S SHUT-IN, REYNOLDS COUNTY.

Through the lower  
coal measures.

limits, will be found whatever oil and gas there is in the State. The whole northwestern corner of the State is overlaid by the upper coal measures. The lower coal measures in Missouri are outlined on their southern edge by rather thick beds of ferruginous sandstone, and these coal measures everywhere overlie the Burlington period of the Mississippian limestone. Between the top of the Mississippian and the bottom of the upper coal measures will be found what ever profitable deposits of petroleum, natural gas, asphaltic oil and asphaltum may exist in any locality in this region.

A further examination of the geological map of Missouri will show that the St. Louis and San Francisco Railway practically outlines the crest of the Ozark uplift, the drainage being on either

side of the railway system. The Ozark mountains are represented by a very greatly eroded plateau, and a cross-section shows sharp fractured and faulted folds at and on either side of the crest. In the deep fissures formed by these fractures, especially in the southwestern part are found veins of lead and zinc. Farther west, where the folds are more gentle and are not fractured, and where they extend through the lower coal measures, will be found whatever profitable deposits of oil or gas may occur in the State.

In the Cherokee  
Shales.

Passing from the Kansas oil field eastward into Missouri, the Cherokee shales rise rapidly until they come to the surface along the line of contact between the coal measures and the lower carboniferous, as outlined on the geological map. From the Kansas field, going eastward, the opportunities for evaporation are constantly greater, and the volatile products being given off, there is left, first, a thick oil, next asphaltic oil containing about equal parts of asphalt and lubricating oil, and lastly, where the sandstones of the Cherokee beds come to the surface along the feather edge of contact, nothing but the residual asphalt,



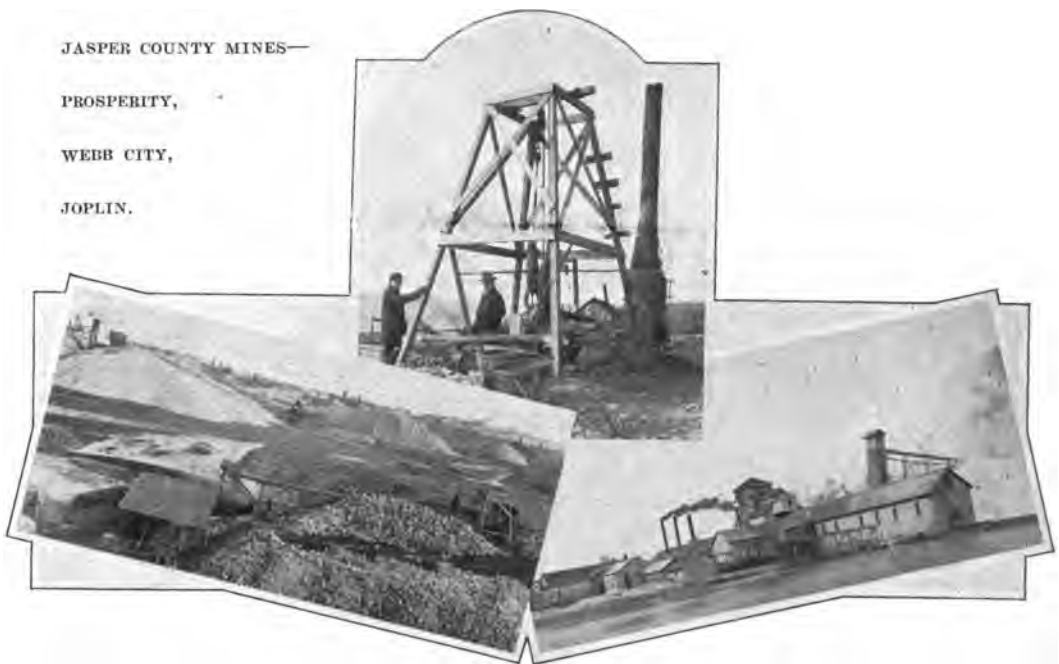
AT ATLAS PORTLAND CEMENT COMPANY'S PLANT, BALLS COUNTY.

which saturates the rocks, is left. This asphaltic sandstone has a thickness, near Sheldon, of 24 feet, and near Liberal of 20 feet, and outcrops at various points along the contact border throughout the State. This asphaltic sandstone is a natural paving material, such as has been used for many years in Germany, and is now being developed in California and Kentucky. It should be recognized as one of the important resources of Missouri.

Midway between this asphaltic rock and the Kansas oil field, drill holes along the western border of Missouri strike the thick, tenacious asphaltic oil before mentioned. This oil frequently drains out of rocks and spreads upon the surface of seepage springs, forming the so-called "tar springs." It is frequently used by farmers as a natural lubricant. Chemically, it may be separated into the finest kind of lubricating oil and a superior grade of asphalt.

Few countries in the world possess so abundant a supply of potable water as the State of Missouri. This is especially true of the southern half of the State, which may be called a region of springs. Two of the largest rivers in

Missouri's abundant supply of potable water.



the world, the Missouri and the Mississippi, traverse the breadth and length of this State, and into the drainage basins of these two streams flow many large tributaries, nearly all the latter being fed by springs of remarkable size and purity of water. North of the Missouri river the State is covered by glacial drift. Here the springs are small and less frequent, but an abundant supply of good water is everywhere obtained from wells in the glacial gravels. South of the Missouri the drift is absent, and erosion has generally cut deep valleys along the borders of the Ozark plateau. Here are found some of the largest and purest springs in the world—in fact, nearly every farm possesses one or more springs of some sort. As examples of some of the great springs, Greer spring, in Oregon county, has a flow of 42,000 cubic feet per minute, or 456,390,000 gallons per day. Mammoth spring, in Shannon county, has a flow of 35,280 cubic feet per minute; Blue or Round spring, in the same county, has a flow of 25,500 cubic feet per minute; Bennett's spring, in Dallas county, has a flow of 1,500 cubic feet per minute; Ha Ha Tonka spring, in Camden county, has a flow of 14,760 cubic feet per minute; Meramec spring in Phelps county has a flow of 7,500 cubic feet per minute; while Mammoth spring in Arkansas, just over

Largest and potent springs.



FIRE BRICK WORKS, FULTON, CALLAWAY COUNTY.

Mineral springs in  
various localities

the Missouri line, has a flow of 21,000 cubic feet per minute. These waters contain from twelve to eighteen grains of mineral matter to the gallon—mainly carbonates of lime and magnesia.

Excelsior Springs.

The State abounds in mineral springs, representing nearly all the varieties of mineral water, many of them being excellently equipped with hotels, bath houses and pleasure grounds, rendering them attractive health resorts. Some of them have acquired more than a local reputation. The largest and most popular resort in the State is Excelsior Springs, in Clay county, a beautiful little city lighted by electricity and with a good sewer system, fine hotels, bath houses, and ample pleasure grounds, all of which have been developed since the discovery of the springs in 1880. The two most important of the springs here are the "Regent" and "Siloam," both ferro-manganese waters which have their source in the coal measures shales. In the "Regent" spring, the manganese bicarbonate, (.9821 grains per gallon) aids in the assimilation in the human system of the

ferrous bicarbonate (3.4376 grains per gallon). Two drill wells, the "Sulpho-saline," 1460 feet deep and the "Salt-sulphur," 1370 feet deep, have been sunk in the vicinity, furnishing sulpho-saline waters which are a fortunate combination with the ferro-manganese, as they counteract the astringent properties of the latter. The "Regent" and "Sulpho-saline" waters are carbonated and shipped to all parts of



COAL SEVENTY-THREE FEET THICK, IN MORGAN COUNTY.

the country. The similarity of these waters to those of St. Moritz and Mont d'Or, in Switzerland and France, has been shown.

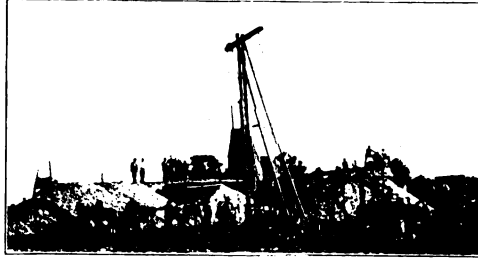
Among other noted chalybeate springs in the State are Pertle Springs, in Johnson county; Eldorado Springs, Cedar county; Randolph Springs, in Randolph county; White Springs, Madison county; Lebanon Magnetic Well, Laclede county, and Paris Springs, Lawrence county.

Of the alkaline waters, Panacea Spring, in Barry county; the Windsor Springs, Henry county; Climax Springs, Camden county; Siloam Springs, Howell county; Plattsburg Spring, Clinton county; Cusenbury Spring, Jackson county; the artesian well, at Clinton, Henry county, and the Nevada well, Vernon county, may be mentioned.

Of the sulphatic waters, the B. B. Springs, of Pike county, carrying 569 grains of saline matter to the gallon, of which 475 are manganesian sulphate, or epsom salts, and the Lineville mineral well, in Mercer county, carrying 180 grains of sodium sulphate to the gallon, and Chouteau Springs, in Cooper county, are the most prominent.

Of the muriatic waters, Sweet Springs, in Saline county, was, until the burning of its large hotel a few years ago, one of the most popular resorts in the State. A considerable quantity of this water is now carbonated and shipped. McAlister Springs, in the same county, is rapidly becoming a health resort. The

Other notable mineral springs.



BACHELOR'S HOPE MINE, PITTSBURG.



ON THE CHARRETTE.

Montesano Springs, in Jefferson county, and the Belcher artesian well, in St. Louis; the Monegaw Springs of St. Clair county; the Spaulding artesian well in Ralls county, interesting as one of the oldest artesian wells in the country, having been sunk in 1823, the Brunswick deep well, in Chariton county; the artesian wells in Henry county; the sulpho-saline wells at Excelsior Springs, in Clay county, already referred to, are all types of this group.

A number of flowing artesian areas have been discovered in the State. One in the north-east corner extends from Clark to Pike county; there is another in St. Louis coun-

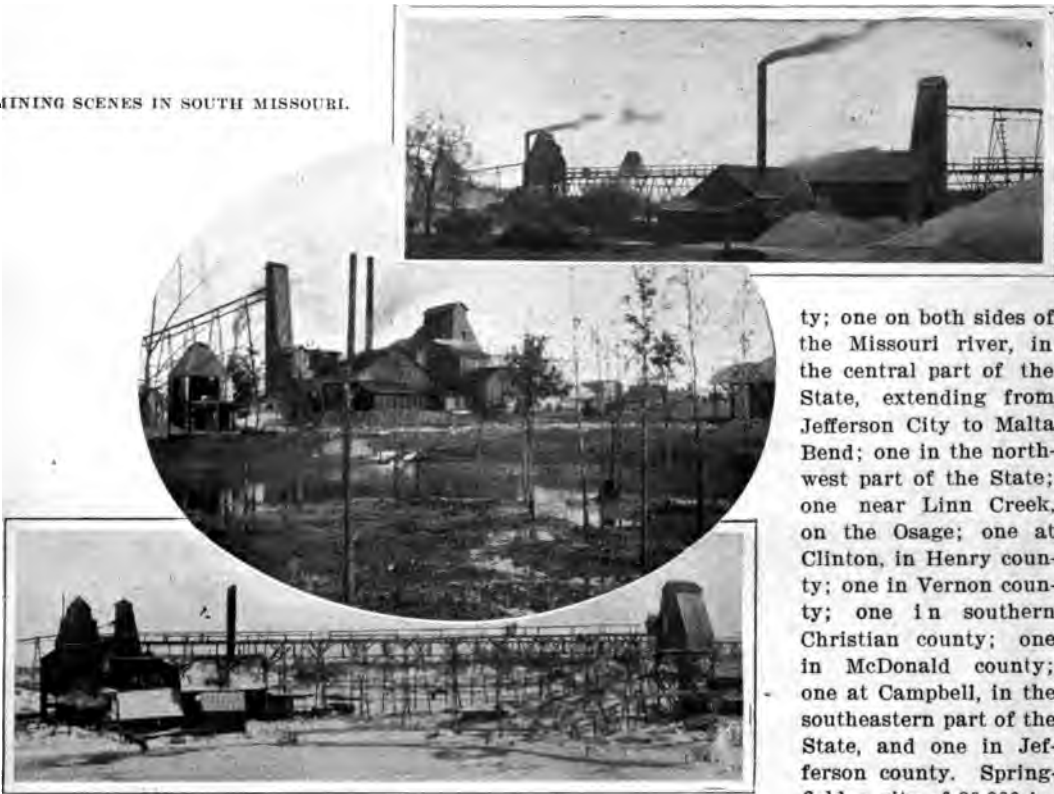
Sweet Springs.

Flowing artesian wells.



CRUSHED STONE WORKS, CAPE GIRARDEAU COUNTY.

MINING SCENES IN SOUTH MISSOURI.



ty; one on both sides of the Missouri river, in the central part of the State, extending from Jefferson City to Malta Bend; one in the northwest part of the State; one near Linn Creek, on the Osage; one at Clinton, in Henry county; one in Vernon county; one in southern Christian county; one in McDonald county; one at Campbell, in the southeastern part of the State, and one in Jefferson county. Springfield, a city of 30,000 inhabitants, gets its entire water supply from Fulbright spring, situated four miles from the town, and yielding 8,000,000 gallons per day; and Clinton is supplied by flowing artesian wells.

Water supply of Missouri towns.

Mining education in the State.



SNIDER'S QUARRY, IRON COUNTY.

Missouri has recognized the great and growing importance of the State's mining interest by the establishment of a technical School of Mines and Metallurgy, a department of the State University, located at Rolla. The School of Mines is well equipped in buildings, laboratories, libraries, and teaching force for excellent work. It enrolls annually two hundred students, nearly one half from other States and foreign countries, and the good result of its establishment and maintenance has been amply demonstrated.



## TRANSPORTATION

**T**RANSPORTATION facilities are essential in civilized States. The roadway, of whatever material, is necessary for the exchange of products. Commerce can not exist, manufactories can not prosper without the aid of adequate transportation. Missouri ranks ninth among the States in present railway mileage, but with the completion of systems under construction or planned, and the expansion of lines now in operation, the State will take higher rank. In navigable waterways Missouri is among the leaders, counting the Mississippi, the Missouri, and the smaller rivers. The commerce of the State has grown beyond the freight and passenger facilities and a system of double tracks has been begun upon the main lines. The canalization of the larger rivers will come with the increasing demand for cheap and augmented transportation. Macadamized roads, already largely constructed in St. Louis, Jackson, Pike, Jasper, Boone, and other counties, are being extended to other sections. There is an abundance of road material available.

The railway main line mileage in Missouri, according to the official report of the Board of Railway and Warehouse Commissioners, is 6,976.13. This is an increase during the last year of 572.37 miles. The accompanying railway map shows the location and extent. The total value of the railways in the State, as reported for taxation, is \$86,698,663.28. There are fifty-seven companies, operating 147 lines of railway. Trains stop at 1,632 stations. The mileage by systems is:

Arkansas and Oklahoma .....	2.20 miles
Atchison, Topeka & Santa Fe.....	271.91 miles
Bellevue Valley .....	3.57 miles
Chicago and Alton .....	263.65 miles
Chicago, Burlington & Quincy.....	1,033.05 miles
Chicago, Great Western .....	84.46 miles
Chicago, Kansas City & Texas.....	20.20 miles
(Now owned by and included in the mileage of Quincy, Omaha and Kansas City.)	
Chicago, Milwaukee & St. Paul .....	140.27 miles
Chicago, Rock Island & Pacific.....	232.41 miles
Crystal Railway .....	3.50 miles
Des Moines & Kansas City.....	11.83 miles

(Now owned and included in C., B. & Q.)



SOUTHWEST  
MISSOURI  
ELECTRIC  
RAILROAD  
CAR.

Eureka Springs Railway .....8.04 miles  
(Now St. Louis & North Arkansas.)  
Greenfield & Northern .....37.67 miles  
(Now included in Frisco.)  
Hamilton & Kingston .....8.04 miles



Missouri  
transportation  
facilities among  
the best.

Kansas City Belt .....6.33 miles  
Kansas City Bridge Terminal .....8.00 miles  
Kansas City, Ft. Smith & Southern.....49.00 miles  
(Now included in Kansas City Southern Mileage.)  
Kansas City, Clinton & Springfield .....236.01 miles  
Kansas City & Independence Rapid Transit.....11.97 miles  
Kansas City & Independence Air Line.....5.58 miles  
The above lines have been absorbed by and are now known as  
Kansas City Southern from Belt Junction to Kansas City..11.97  
Kansas City & Independence Air Line, Air Line Junction  
to Independence .....5.58 17.55 miles  
Kansas City, Nevada & Ft. Smith.....75.52 miles  
(Now included in K. C., C. & Springfield.)  
Kansas City, Osceola & Southern .....115.29 miles  
(Now included in Frisco mileage.)  
Kansas City Suburban Belt .....12.00 miles  
(Now included in Kansas City Southern.)  
Kansas City Southern .....187.97 miles  
Kansas & Texas Coal Company.....10.00 miles  
(Now known as Missouri & Louisiana.)  
Keokuk & Western .....69.60 miles  
(Now C., B. & Q.)  
Manufactures Railway (in St. Louis)......66 miles  
Missouri and Louisiana Railway .....10.00 miles  
Mississippi River & Bonne Terre .....47.47 miles  
Missouri, Kansas & Texas .....507.31 miles  
Missouri Pacific & Iron Mountain .....1,328.07 miles  
Missouri Southern .....20.15 miles  
Omaha & St. Louis .....78.00 miles  
(Now included in Wabash.)  
Paragould & Southeastern .....13.07 miles  
Quincy, Omaha & Kansas City .....253.39 miles  
Rockport, Langdon & Northern .....5.60 miles



SOUTHWEST  
MISSOURI  
ELECTRIC  
RAILROAD  
CAR.



Eureka Springs Railway .....	8.04 miles
(Now St. Louis & North Arkansas.)	
Greenfield & Northern .....	37.67 miles
(Now included in Frisco.)	
Hamilton & Kingston .....	8.04 miles

Missouri  
transportation  
facilities among  
the best.

Kansas City Belt .....	6.33 miles
Kansas City Bridge Terminal .....	8.00 miles
Kansas City, Ft. Smith & Southern .....	49.00 miles
(Now included in Kansas City Southern Mileage.)	
Kansas City, Clinton & Springfield .....	236.01 miles
Kansas City & Independence Rapid Transit .....	11.97 miles
Kansas City & Independence Air Line .....	5.58 miles
The above lines have been absorbed by and are now known as	
Kansas City Southern from Belt Junction to Kansas City ..	11.97
Kansas City & Independence Air Line, Air Line Junction	
to Independence .....	5.58 17.55 miles
Kansas City, Nevada & Ft. Smith .....	75.52 miles
(Now included in K. C., C. & Springfield.)	
Kansas City, Osceola & Southern .....	115.29 miles
(Now included in Frisco mileage.)	
Kansas City Suburban Belt .....	12.00 miles
(Now included in Kansas City Southern.)	
Kansas City Southern .....	187.97 miles
Kansas & Texas Coal Company .....	10.00 miles
(Now known as Missouri & Louisiana.)	
Keokuk & Western .....	69.60 miles
(Now C., B. & Q.)	
Manufactures Railway (in St. Louis) .....	.66 miles
Missouri and Louisiana Railway .....	10.00 miles
Mississippi River & Bonne Terre .....	47.47 miles
Missouri, Kansas & Texas .....	507.31 miles
Missouri Pacific & Iron Mountain .....	1,328.07 miles
Missouri Southern .....	20.15 miles
Omaha & St. Louis .....	78.00 miles
(Now included in Wabash.)	
Paragould & Southeastern .....	13.07 miles
Quincy, Omaha & Kansas City .....	253.39 miles
Rockport, Langdon & Northern .....	5.60 miles

i  
;  
;  
;  
S  
S  
S  
S  
S  
S  
S  
S  
S  
S  
S

சு  
சு  
சு





MERAMEC RIVER, NEAR VALLEY PARK, ST. LOUIS COUNTY.

St. Clair, Madison & St. Louis Belt .....	1.87 miles
St. Joseph & Grand Island .....	10.66 miles
St. Joseph Terminal .....	8.35 miles
St. Louis Merchants Bridge Terminal .....	7.44 miles
St. Louis & Hannibal .....	103.00 miles
St. Louis, Cape Girardeau & Ft. Scott.....	103.50 miles
(Now St. Louis, Memphis & Southeastern.)	
St. Louis, Kennett & Southern .....	19.25 miles
(Now included in St. Louis & Gulf.)	
St. Louis, Kansas City & Colorado.....	100.00 miles

List of Missouri  
railway systems.



MISSOURI PACIFIC RAILWAY BRIDGE.



List of Missouri  
railway systems.

St. Louis, Memphis & Southeastern .....	214.59	miles
St. Louis & Gulf .....	55.02	miles
St. Louis & North Arkansas .....	7.82	miles
St. Louis & San Francisco .....	570.93	
Purchase of Kansas City, Ft. Scott & Memphis and other increase .....	529.99	1,100 92 miles
St. Louis & Southwestern .....	127.10	miles
St. Louis Transfer .....	6.50	miles
Terminal Railroad Association .....	2.29	miles
Wabash .....	577.38	miles
Williamsville, Greenville & St. Louis .....	25.00	miles
Leavenworth, Terminal & Bridge Company.....	.93	miles
Louisville & Nashville, in St. Louis .....	.15	miles
Pertle Springs Railway .....	2.25	miles
Higginsville Switch .....	3.62	miles
Union Pacific Railway, in Kansas City .....	.50	miles

With the completion of the Rock Island system from St. Louis to Kansas City early in the spring of 1904, there are in operation connecting these two cities, seven trunk lines. St. Joseph and other cities are all well supplied with railroads.

The steam railroads now in operation in Missouri have all been constructed since July 4, 1851, upon which day was begun the building of the Pacific railroad from St. Louis westward. A locomotive—the first west of the Mississippi river—was put upon the track in 1852, a passenger train run to Cheltenham, a distance of six miles, before the close of that year, and the road opened to Pacific (then Franklin) in July, 1853. During the next decade the Pacific road was completed to Sedalia, the Southwest Branch (now the St. Louis and San Francisco) to Rolla, the St. Louis and Iron Mountain to Pilot Knob, the North Missouri (now the St. Louis, Kansas City and Northern) to Macon, the Hannibal and St. Joseph to St. Joseph, the Cairo and Fulton to

History of Missouri  
railroads.



A FREIGHT STEAMER ON THE MISSOURI RIVER.



COUNTRY ROAD ON GRAND PRAIRIE, CALLAWAY COUNTY.

Sikeston, and forty-four miles of track were laid on the Platte County (now the Kansas City, St. Joseph and Council Bluffs) road, making in all 800 miles of railroad in the State.

Following the war period, during the years from 1865 to 1873, occurred the memorable era of railroad expansion in the United States. The 35,000 miles of railroad in this country grew to 71,000. Missouri led the average State, her mileage being more than trebled, increasing to 2,860. Increase during the subsequent years, was also rapid, until the mileage of 6,996.13—at present over 7,000—was reached.

Remarkable growth  
of Missouri  
railroads.

**1852** 1.5 MILES

**1854** 1.38 MILES

**1855** 1.139 MILES

**1860** 817 MILES

**1870** 2,000 MILES

**1880** 3,965 MILES

**1890** 6,142 MILES

**1900** 6,887 MILES

**1904** 7,000 MILES

ASSESSED VALUATION OF RAIL-  
ROAD PROPERTIES IN 1900

STATES	MILES	ASSESSMENT	PER MILE
Missouri	6,777	\$ 77,448,204	\$ 11,430
Arkansas	3,052	24,051,139	7,806
Illinois	10,079	77,878,672	7,726
Kansas	8,716	57,883,714	6,870
Iowa	9,236	46,008,510	4,981

GROWTH OF RAILWAY MILEAGE IN MISSOURI.

Electricity has within the last few years begun to be employed as motive power. Electric roads have been built in St. Louis, St. Charles, Jackson, Buchanan, Jasper and other counties and the outlook is for great extension of these and other electric suburban and interurban lines.

Electricity as motive  
power.

The river traffic of Missouri would be largely increased if proper governmental support was given to the improvement and maintenance of navigable channels. This traffic, which has declined for years, because of the building of railroads, has begun to increase and will continue to grow as the value of the rivers, as competitive and supplementary to the railroads, is appreciated.

River traffic.

The country roads have shown improvement in the last few years. Every part of the State is reached by them and a system of scientific supervision and cash boxes for road purposes, with the abundance of road material at hand, will make the road and highway system of Missouri unsurpassed by that of any State. Additional statistics as to mileage of the various roads, steam, electric, gravel, and earth, and the waterways, are set forth in other chapters.

Country roads.





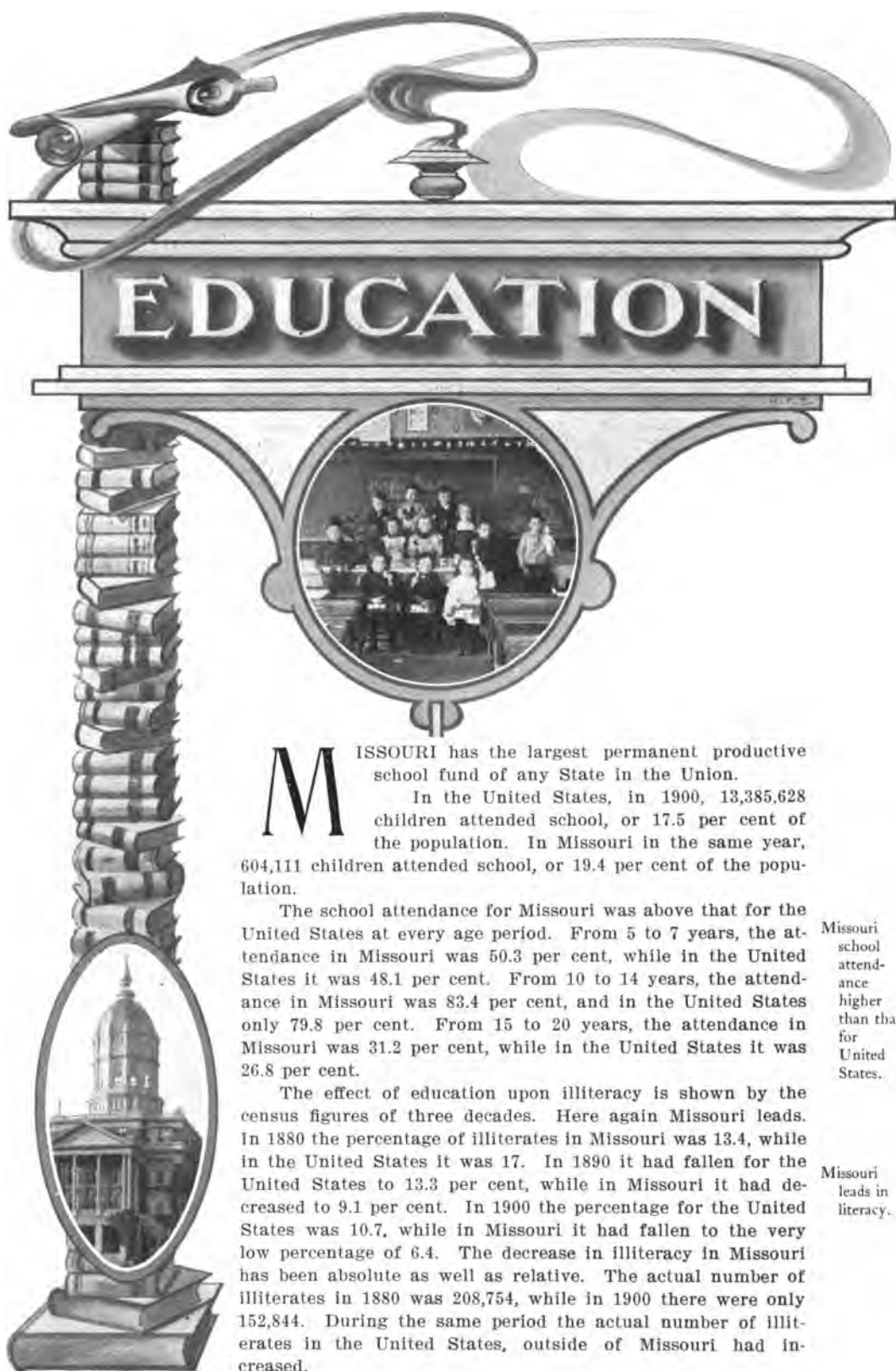
A JASPER COUNTY ROAD.

Constant increase in  
transportation  
facilities.

Transportation facilities in Missouri are being constantly increased and improved. The rolling stock and equipment of the railways is of the best. Every section of the State is reached by one or more steam railroads. In provision for easy access to profitable markets, Missouri with an abundance of local roads, in the heart of the continent, traversed by the great transcontinental lines of traffic, is unexcelled for situation and transportation.



ON THE PIKE, MARION COUNTY.



**M**ISSOURI has the largest permanent productive school fund of any State in the Union.

In the United States, in 1900, 13,385,628 children attended school, or 17.5 per cent of the population. In Missouri in the same year, 604,111 children attended school, or 19.4 per cent of the population.

The school attendance for Missouri was above that for the United States at every age period. From 5 to 7 years, the attendance in Missouri was 50.3 per cent, while in the United States it was 48.1 per cent. From 10 to 14 years, the attendance in Missouri was 83.4 per cent, and in the United States only 79.8 per cent. From 15 to 20 years, the attendance in Missouri was 31.2 per cent, while in the United States it was 26.8 per cent.

The effect of education upon illiteracy is shown by the census figures of three decades. Here again Missouri leads. In 1880 the percentage of illiterates in Missouri was 13.4, while in the United States it was 17. In 1890 it had fallen for the United States to 13.3 per cent, while in Missouri it had decreased to 9.1 per cent. In 1900 the percentage for the United States was 10.7, while in Missouri it had fallen to the very low percentage of 6.4. The decrease in illiteracy in Missouri has been absolute as well as relative. The actual number of illiterates in 1880 was 208,754, while in 1900 there were only 152,844. During the same period the actual number of illiterates in the United States, outside of Missouri had increased.

Missouri  
school  
attendance  
higher  
than that  
for  
United  
States.

Missouri  
leads in  
literacy.

Eleven million  
dollars annually  
for schools.

One-third  
the State revenue  
for public  
schools.

Average  
rate of  
school tax.

School enrollment.



Missouri has school property valued at \$42,600,117. Nearly eleven million dollars are annually expended for schools.

There is a total enrollment in Missouri schools of 780,541 pupils, with 20,166 teachers. There are in the State 283

public high schools, with 23,880 pupils; 9,119 rural and 623 city and town districts.

Over 25 per cent of the total amount spent for Missouri public schools comes from State taxation and interest on public funds. The

Missouri school idea is a mean between entire local control and local taxation on the one hand, and large State control and State taxation upon the other.

The Missouri constitution requires that at least one-fourth of the State revenue be set apart for the public schools. The legislature, however, has for years, set apart one-third for the purpose, not including amounts for the State University and normal schools. This is unexcelled by any other State in the Union.

Missouri expends in a single year for schools, public, private and denominational, \$10,959,828. This is nearly ten per cent of the entire assessed valuation of the State. It is more than four times as much as is expended upon all the branches of the State government, legislative, judicial, and executive, excepting schools.

Missouri expends annually for schools more than the entire cost of the State governments of Iowa and Kansas, or of Illinois and Nebraska combined.

The average rate of school tax is 57 cents on the \$100 valuation.

The enumeration shows a grand total of 974,923 children of school age, 6 to 20 years; white—male, 471,522; female, 454,949; total, 926,471; colored—male, 24,543; female, 23,909; total, 48,452.

The total permanent school funds, State school, seminary, county school, township school, and special district, aggregate \$13,023,997. Private and church schools have an endowment of \$8,988,322.

The school enrollment is 704,193; divided as follows: White—male, 338,927; female, 334,009; total, 672,936. Colored—male, 14,760; female, 16,497; total, 31,259. There are 10,101 school houses for white children in Missouri, and 450 for colored children. The two races have separate schools. The general average for teachers' wages in the district schools is \$308.52. There are 350,000 volumes in the district school libraries of Missouri.

By the time Missouri came into the Union, educational sentiment had become quite general within her borders. The liberal grants of land from the Federal Government for educational purposes had the double effect of emphasizing the



KINDERGARTEN,  
ST. LOUIS.



FIRST GRADE,  
CARUTHERSVILLE.

MISSOURI  
CHILDREN  
IN SIX  
SCHOOL  
GRADES.



SECOND GRADE,  
MEXICO.

educational needs of the new country and of lightening the burdens of the people in meeting them. The original constitution of the State, adopted in 1820, made provision for free schools and called the attention of the legislature to the importance of a State University. In the language of the revised constitution of 1865, "A general diffusion of knowledge and intelligence being essential to the preservation of the rights and liberties of the people, the General Assembly shall establish and maintain free schools for the gratuitous instruction of all persons in this State between the



THIRD  
GRADE,  
FAYETTE.



FOURTH GRADE, COLUMBIA.



FIFTH GRADE,  
BOONVILLE.

SIXTH GRADE,  
CARROLLTON.



SEVENTH GRADE,  
MONTGOMERY CITY.

EIGHTH GRADE,  
PARIS.



MISSOURI CHILDREN IN FOUR SCHOOL GRADES.

Larger investment  
in schools in last  
ten years than  
any other State.

Great growth of  
public high  
school.

Public school  
statistics.

high school. Only a generation ago the primary schools of this class which were respectably housed could be enumerated in numbers of one figure; to-day they are numbered by scores, and the growth in efficiency seems to have been commensurate with that of physical equipment. As late as 1890 only 23 high schools were accredited by the State University, now 122 are so accredited—a growth of over 450 per cent—withstanding the requirements for such honor have been increased within the period. The popularity of the public high school, as marked by this increased equipment and greater scholarship, is well founded and will endure. A much larger percentage of Missouri children are now in school, a larger percentage of the entire school enrollment are now in the public high school, and a larger percentage of the population are now in higher institutions of learning than at any previous time. These facts need no comment further than the statement that they are the result of a growth in educational sentiment rather than merely an expression of our increased wealth.

The public school statistics of Missouri show these interesting figures: school districts—rural, 9,119; city and town, 623; teachers—rural, 10,393; city and town, 6,530; enumeration—rural, 482,284; city and town, 492,639; enrollment—rural, 402,495; city and town, 301,248; average length of term in days—rural, 126; city and town, 171. Three and three-fourths per cent of the pupils enrolled are in the high schools. The high school graduates numbered last year 7,143.

ages of five and twenty-one years." The revision of 1875 changed the period of free schooling to that between the ages of six and twenty years. The early legislatures took up the important matter of providing free schools and following sessions have revised and added to existing laws.

With the decadence of the old sentiments which brought the private schools into existence the public school took on new life and power. Support came more cheerfully, better equipment resulted and teachers of higher qualifications were in demand. A united pride in the public school and its willing support gave it a growth and popularity which few States have known. Within the last decade Missouri has per-

haps invested a larger per cent of her wealth in public school property than has any other State in the same period. This is especially true of the public

*W. S. Markle.*

Early in the history of this State when there were no free schools of the secondary grade the churches came to the front and provided academies which were the worthy forerunners of the present system of high schools. The academies did almost nothing with the higher branches of knowledge until the wonderful development of the public school system provided the high school for the field occupied by the academy. To avoid competition with the free school and to meet a new demand, that for higher education, these academies took up the advanced work and more nearly occupied the sphere of the college. The importance of these transitional institutions which came in our day of need and which have changed their sphere of activity from time to time as the varying needs of the community dictated, can not be overestimated. Founded by the churches, their faculties were composed of Christian men and women whose sterling worth was an important factor in fostering high character and noble ideals among our people. The academy or college, as frequently called and sometimes properly, at once became the center of influence for culture in its community and as its students went out into the surrounding country to teach or preach or build homes, the culture of the college life went with them. As remarked by an observing citizen of the State: "One can easily detect the influence of the college life whenever he comes within fifty miles of one of these institutions."

The product of these modest forerunners of the present high school and the modern college became the patrons and champions of our institutions of broader culture, thus bringing to this and future generations a rich heritage in consequence of the wisdom, self-sacrifice and earnest labors of the pioneers.

Many of these academies passed out of existence when the public high school came to occupy their sphere of activity. Others moved up to a higher plane and continue to serve an important purpose by giving an opportunity for higher work preparing for a University. In these institutions many boys and girls who have graduated from the high school, but are yet young and immature, may pursue their college work near home and in an atmosphere more congenial to their present needs than that of a larger and higher institution. Whatever may be said concerning the present need of the advanced academy and small college, all thoughtful people must acknowledge a debt of gratitude to them for the important service they rendered during the formative period of our public school system and of the State University.

In all the schools of Missouri are employed 20,166 teachers. Of these 16,923 are in the public schools, 185 in the State University and Normal schools, 90 in other State institutions, 1,417 in private colleges and academies, and 1,551 in parochial and other private elementary schools. The number of pupils enrolled is 780,541, divided thus: public, elementary, and high schools, 704,193; State University and normal schools, 5,086; State institutions for defectives, 954; private colleges and academies, 22,072; parochial and other private elementary schools, 48,236. The annual expenditure of \$10,959,828 for Missouri schools is thus divided: public, elementary and high schools, \$8,363,128; State institutions, University and normal schools, \$680,000; State institutions for defectives, \$274,000; private colleges and academies, \$1,307,700; parochial and other private elementary schools, \$335,000. There is a school in easy reach of every child in Missouri.





CHRISTIAN COLLEGE, COLUMBIA.

The estimated value of school property is divided as follows: public, elementary and high schools, \$23,339,117; State University and normals, \$2,475,000; State institutions for defectives, \$1,295,000; private colleges and academies, \$11,531,000; parochial and other private elementary schools, \$3,960,000; total, \$42,600,117.

Missouri's first normal school was a private enterprise, founded by a man whose educational enthusiasm



HOWARD-PAYNE COLLEGE, FAYETTE.

amounted almost to inspiration. The founder's ambition was to prepare teachers in mind and spirit for the duty of teaching the youth of the land, a service which he regarded as sacred. The nature of Doctor Joseph Baldwin's work gave the community a high idea of the teacher's calling. It turned the public thought from the school master to the school teacher—from the stern commander to the sympathetic leader. Public sentiment rapidly crystallized in favor of making this useful school a State institution. The legislature responded to this desire in 1871, and also established the normal school at Warrensburg, dedicating both schools to the preparation of



CHRISTIAN UNIVERSITY, CANTON.





FOURTH YEAR, SEDALIA.

teachers for the public schools of the State. In 1873 the legislature placed its seal of approval upon the State normal school by pro-

SECOND  
YEAR,  
CARTHAGE.

viding for one in the southeast district, locating it at Cape Girardeau. The attendance upon these schools has always shown public confidence in their usefulness. About 3,000 prospective teachers are instructed in these schools annually. The faculties are composed of men and women of superior training and exceptional skill.

Missouri has looked well to the educational opportunities of the children of her colored people, and has provided, in Lincoln Institute at Jefferson City, one of the best schools in the coun-

THIRD YEAR,  
MOBERLY.

FIRST YEAR,

CLINTON.

## SOME MISSOURI HIGH SCHOOL PUPILS.

try for the preparation of colored teachers. The nature of the work of this normal school differs from that of the others only as the different needs and aptitude of the race seem to require. The courses of instruction are broad, the management is liberal, and the faculty consists of the best colored educators the State can procure. Perhaps the most marked feature of this institution is its department of agriculture and manual industries, in which it takes high rank. Separate schools in Missouri for white and colored children, supported by equal taxation, do not imply any less privilege for the children of the colored race. Indeed the colored children are, by statute, given advantage. The white child has free tuition in the district of his residence, but must pay tuition if he goes to another district. The colored child, on the contrary, if the district in which he resides is too small to maintain a colored school, may go, at the expense of the taxpayers of the district, to school in any other district.

No institution in Missouri has had a more interesting and inspiring career than has the State University. Interesting because the race has always viewed with lively concern the struggle of an individual or institution for a recognized place to live and work out a destiny. Inspiring because its energetic career has imparted a quickening impulse to every phase of educational work in the State. The University was founded in 1839, in Columbia, whose citizens, together with others of Boone county, offered a bonus. Some of the donors subscribed and afterwards paid more than their entire estates were worth at the time the sub-

Education of the  
colored children.

The State  
University.



SOME BUILDINGS OF THE UNIVERSITY  
OF MISSOURI AT COLUMBIA.LATHROP  
HALL.ACADEMIC  
HALL.PRESIDENT'S  
RESIDENCE.AGRICULTURAL  
BUILDING.ZOOLOGY  
AND  
GEOLOGY  
BUILDING.AGRICULTURAL  
DEAN'S  
RESIDENCE.

THE OLD COLUMNS.

The beginnings  
of the State  
University.

scriptions were made, and Switzler's History of the citizens of ever remembered repudiated to the vided in the

stone of the main building was laid July 4, 1840; the University dedicated July 4, 1843; the corner stone of the building for "The College of Agriculture and Mechanic Arts," laid June 28, 1871; and the re-dedication of the University, as enlarged and improved, was on June 4, 1885.

University, says: "To the honor of these Boone county let it be said and forbered, that not one dollar of this sum was ated, but the whole collected and appro-benefit of the public school fund as pro-Constitution of the State." The corner

Seven departments  
at Columbia and  
one at Rolla.

The University at Columbia has seven well equipped departments: Academic, Law, Medicine, Teachers College, Agriculture, including Engineering, Graduate, Military, and one, the School of Mines and Metallurgy, at Rolla. The Agricultural College is one of the best in the United States. The federal government has, in connection with the college, located an experiment station, which is doing excellent work. The Parker Memorial Hospital, on the University campus, is a valuable addition to its medical school as well as of value in caring for the health of the students. It is the result of the gift of William L. Parker.

The University was conceived and has been maintained from the first as co-ordinate with the common schools in forming the State school system. Especially in late years has its influence been exerted toward the articulation of all

the public schools, and it is easy to believe that this influence, aided by county supervision so much longed for by nearly all school people, would give a thoroughly articulated system of schools extending to every county of the State. New departments of instruction have been added from time to time until its courses and equipment now offer all the opportunities of a high grade State University. The attendance has grown until now 1,654 students are enrolled. The faculty has, almost without exception been presided over by successful leaders of teach-

The present of  
the State  
University.

ers. The curators have generally avoided an error quite common to the direction of large educational institutions, that is, the selection of heads of departments and instructors on their scholarship alone. No institution ever became so prosperous or popular that it could afford to employ any but good teachers, and a good teacher possesses other qualities fully as essential as scholarship.

With its present high standing in the confidence of the people, and consequent strong financial support, the University should continue to increase its usefulness almost indefinitely. The average citizen is proud of the State University, and it is a satisfaction to predict that in the not distant future every Missouri child, as he looks along the vista of free public education, the common heritage of all, will see the State University at the farther end; entirely free and as inviting as the rural and village schools.

Besides the State University there are a score of institutions doing excellent work in the field of higher education. Washington University, St. Louis, which will move into its new home in the vicinity of Forest Park at the close of the Louisiana Purchase Exposition, will be one of the best equipped universities in the country. This institution has long been known for its good organization and efficient work. With its present strong financial backing it takes rank with the few great universities of America.

The St. Louis University had its modest beginning in 1824 as a school for Indian boys. The founders and teachers were Jesuit Fathers, whose devotion to the cause of Christian education, aroused the admiration of the community, creating a general desire for a broader opportunity for the school. A new and beautiful site was donated in what was then the center of the city, and the legisla-

LAW  
BUILDING.



BENTON  
HALL.



READ HALL.



LAW AND CHEMISTRY  
BUILDINGS.

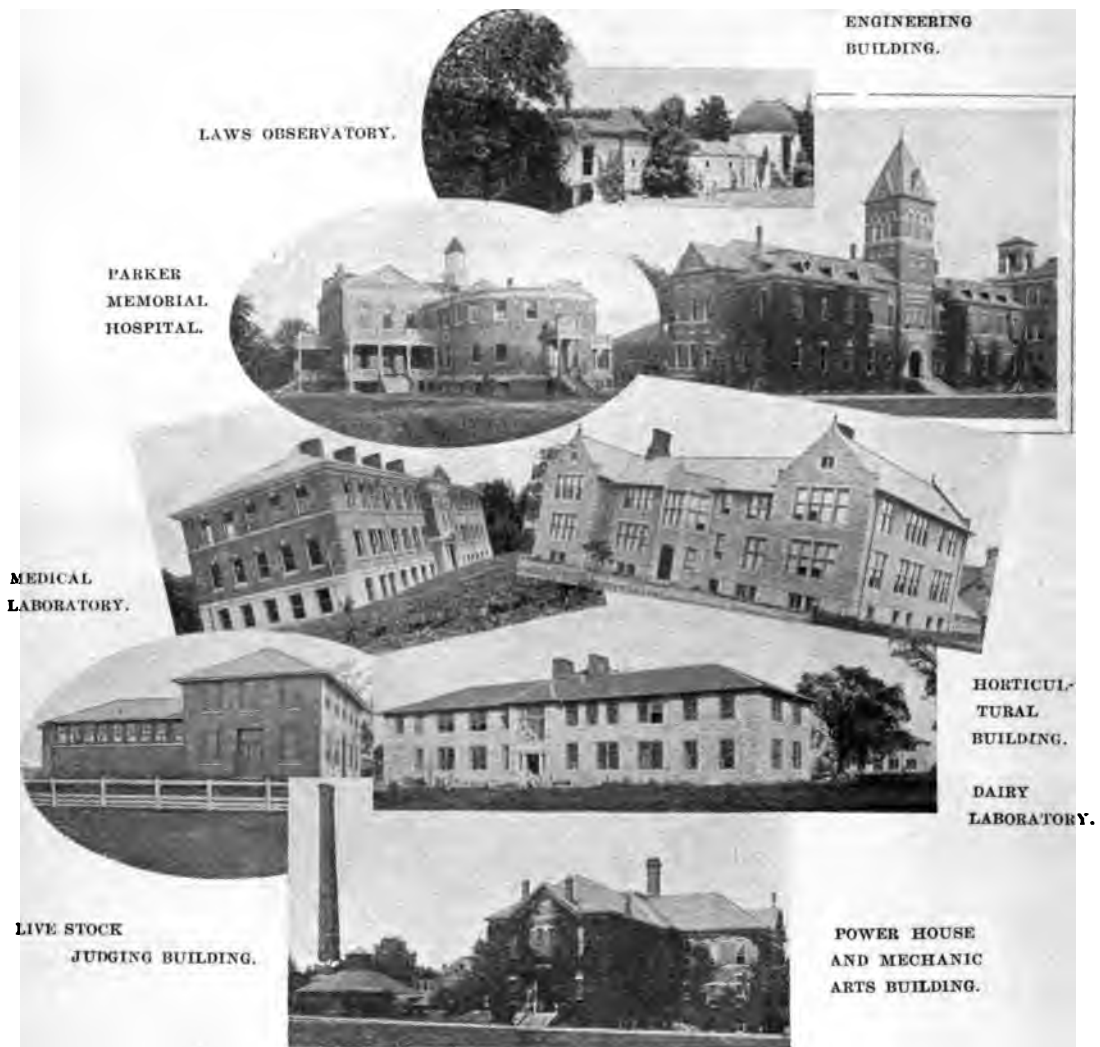


GREEN-  
HOUSE.

SOME BUILDINGS OF THE  
UNIVERSITY OF MISSOURI AT COLUMBIA.

Its future.

Other institutions  
for higher  
education.



SOME BUILDINGS OF THE UNIVERSITY OF MISSOURI AT COLUMBIA.

ture of 1832 granted a liberal charter and gave the school its present name. This university has never received any large bequests, has no endowment fund, but depends for support upon the tuition and board of its students. Its growth has thus been slow but sure. The instructors have always been devoted scholars who were not attracted by large salaries but by the opportunities for noble service in behalf of the youth of the church. Its record is such as brings satisfaction to its friends and patrons, over whom it has a profound influence.

Central College is the outgrowth of the Howard county high school, which was opened at Fayette when opportunities for secondary education in Missouri were all but unknown. In 1847 it was converted into a college of the Methodist Episcopal Church South, and has held an important place among the colleges of the State. It is the alma mater of many thousands who have become cultured citizens of perhaps every State in the Union.

William Jewell College was founded in 1849, and located at Liberty by the Missouri Baptist General Association to promote the preaching of the gospel within the bounds of the State. Its chief promoter was Dr. William Jewell, of Columbia, in whose honor the college was named. Its work has always been of

Washington  
University.

Central College

William Jewell  
College.

a high order, giving it an honorable standing among our institutions of higher education.

Fulton became the home of Westminster College, which was established in 1853 by the Presbyterian church of the State to influence and fit young men for the ministry. The college has recently added new buildings and considerable endowment.

Christian Brothers College was opened in St. Louis in 1850, and chartered in 1885. Its founders and teachers were the Christian Brothers of the Catholic church, whose devotion to the cause of Christian education has given this institution a secure place in the affections of its patrons and the respect of the community at large.

Westminster College.



NORWOOD HALL.



ORIGINAL BUILDING.



CHEMICAL LABORATORY.

MECHANICAL HALL.



MINES AND METALLURGY BUILDING.

SOME BUILDINGS OF THE SCHOOL OF MINES—A DEPARTMENT OF THE UNIVERSITY OF MISSOURI AT ROLLA.

St. Vincent's College is an off-shoot from St. Mary's Seminary, the first institution of higher education established in Missouri, if not indeed, the first west of the Mississippi. The college was opened at Cape Girardeau in 1843 by the Catholic church, and is the focal point of the higher educational interests of that church for a large territory.

St. Vincent's College.

Drury College represents the zeal and devotion of the ministry of the Congregational church of this State, who under the leadership of the Rev. John C. Learned, brought to realization a resolution of their body to establish an institution "where men might be thoroughly trained for leadership in the growing southwest." This college was located at Springfield and its career began in 1873. The record of the Drury graduates indicates that the college is following successfully the spirit of the above quoted purpose of its founders.

Drury College.

In the year 1875 a new college came into existence at Parkville with a special and most useful mission. From its inception Park College has been industrial as well as intellectual. Its students cultivate a farm of 1,200 acres and do much other work of an industrial character by which they are trained to habits of usefulness, led to see the various industries from an intelligent standpoint

Park College.

and permitted, in many cases, to meet the expense of their college life. The institution is housed in a group of neat commodious buildings which have been erected and equipped largely by student labor.

**SOME OF THE COLLEGES OF THE STATE FOR BOTH SEXES, IN WHICH DEGREES ARE CONFERRED, THE NAME, LOCATION, CONTROL AND YEAR OF OPENING:**

Avalon College, United Brethren, Trenton, 1869.  
 Buchanan College, Troy, nonsectarian.  
 Carleton College, Farmington, Methodist Episcopal.  
 Central College, Fayette, Methodist Episcopal South, 1857.  
 Central Wesleyan College, Warrenton, Methodist Episcopal, 1864.  
 Christian Brothers College, St. Louis, Catholic, 1851.  
 Christian University, Canton, Christian, 1855.  
 Clarksburg College, Clarksburg, Baptist, 1876.  
 Drury College, Springfield, Congregational, 1873.  
 Evangelical Lutheran, Altenburg, Lutheran.  
 Grand River Christian Union College, Edinburg, Christian, 1850.  
 La Grange College, La Grange, Baptist, 1858.  
 Missouri Bible College, Columbia, Christian, 1896.  
 Missouri Valley College, Marshall, Cumberland Presbyterian, 1889.  
 Missouri Wesleyan College, Cameron, Methodist Episcopal, 1887.  
 Morrisville College, Morrisville, Methodist Episcopal South, 1872.  
 Northwest Missouri College, Albany, Methodist Episcopal South, 1893.  
 Odessa College, Odessa, nonsectarian, 1883.  
 Park College, Parkville, Presbyterian, 1875.  
 Pike College, Bowling Green, nonsectarian, 1882.  
 Pritchett Institute, Glasgow, nonsectarian, 1866.  
 Southwest Baptist College, Bolivar, Baptist, 1878.  
 St. Louis University, St. Louis, Catholic, 1829.  
 St. Vincent's College, Cape Girardeau, Catholic, 1843.  
 Tarkio College, Tarkio, United Presbyterian, 1883.  
 University of the State of Missouri, Columbia, state, 1841.  
 Washington University, St. Louis, nonsectarian, 1859.  
 Westminster College, Fulton, Presbyterian, 1853.  
 William Jewell College, Liberty, Baptist, 1849.  
 In addition, there are among the degree-conferring colleges for women, the following:  
 Baird College, Clinton, nonsectarian, 1890.  
 Baptist Female College, Lexington, Baptist, 1855.  
 Central Female College, Lexington, Methodist Episcopal South, 1869.  
 Christian College, Columbia, Christian, 1851.  
 Cottey College, Nevada, Methodist Episcopal South, 1884.  
 Forest Park University, St. Louis, 1861.  
 Hardin College, Mexico, Baptist, 1873.  
 Howard-Payne College, Fayette, Methodist Episcopal South, 1844.  
 Liberty Ladies' College, Liberty, 1890.  
 Lindenwood College, St. Charles, Presbyterian, 1830.  
 Stephens College, Columbia, Baptist, 1856.  
 St. Louis Seminary, Jennings, 1871.  
 William Woods College, Fulton.

The youngest of this group is Missouri Valley College, founded by the Cumberland Presbyterian church in 1889 and located at Marshall. The especial vigor by which its career has been marked and the exalted purpose which has inspired its management give it high rank among our institutions of learning.

Several other schools in the State are doing more or less work of college grade. These are noted in other chapters of this volume. The private and church schools of Missouri are thus tabulated: Colleges—male and co-educational, 21; teachers, 540; pupils, 6,808; colleges—female, 18; teachers, 260; pupils, 3,071; business and normal schools, 20; teachers, 142; pupils, 4,056; military academies, 7; teachers, 48; pupils, 561; special, medical, dental, etc., 25; teachers, 224; pupils, 2,989; academies, 47; teachers, 215; pupils, 5,047; parochial (Catholic), 199; teachers, 746; pupils, 31,732;



BUILDINGS AND GROUNDS OF LINCOLN INSTITUTE, JEFFERSON CITY.



STATE NORMAL SCHOOL, NO. 2, WARRENSBURG.

parochial (Lutheran), 180; teachers, 211; pupils, 9,493; private and other church, 45; teachers, 80; pupils, 2,516.

The Manual Training School for Boys at Boonville, and the Industrial Home for Girls at Chillicothe are industrial and reformatory. The State also supports in St. Louis, a school for the blind, and in Fulton a school for the deaf and dumb. All these institutions rank high for efficiency.

With all our advancement in wealth and institutions and machinery of government there is danger everywhere of losing sight of some of the cardinal principles underlying all good education and useful culture. Great buildings and fine equipment are good only when well used. There is danger that a splendid school plant will come to be reckoned as a great school and small equipment as indicative of a poor school. In fact false distinctions are but natural to the person of casual observation. He can see the indication of greatness in the fine building

Value of equipment  
for schools.



STATE NORMAL SCHOOL, NO. 3, CAPE GIRARDEAU.  
*Mo.—14*

but is too short sighted to trace its truer signification in the sound characters and genuine culture of the men and women a school has educated. With all our progress in modern buildings and expensive apparatus we can not afford to lose sight of the fact that this equipment is as far from being a school, as a modern city mansion is from being a home. Missouri is fortunate that the spirit prevalent in many places has not developed to any marked extent here. The quality of the school must always be found rather in its spirit, and we must not, as people, allow ourselves to fall into a passive state of mind caused by the greatness and richness of our modern school conveniences and forget that we must be as watchful as ever to foster in our schools the sterling qualities

Missouri fortunate  
in school support.

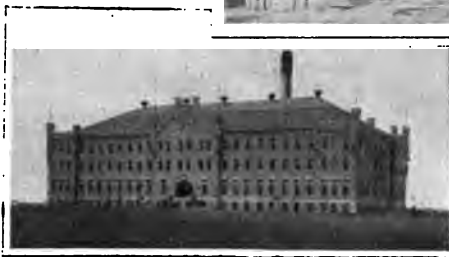
The result of  
education.



MISSOURI  
MILITARY  
ACADEMY.  
MEXICO.



WENTWORTH  
MILITARY  
ACADEMY.  
LEXINGTON.



BLEES MILITARY  
ACADEMY.  
MACON.

of heart and mind that have ever distinguished the peoples of real culture and true great-

ness. The buildings which housed the great school at Rugby had small effect upon the character of its pupils. It was the spirit of the immortal Dr. Arnold

which inspired them and all who loved the history of that old school. So has it been with all schools which live in the hearts and lives of their pupils and of us all. So it is with countless city, village and rural schools all over the land. The spirit of some great teacher overshadows all material things

STATE NORMAL SCHOOL,  
NO. 1, KIRKSVILLE.

and moulds characters more enduring than time. Thus it must ever be if we are to have a great and splendid race of noble men and true women.







**M**ISSOURI has ever encouraged those things which make for the higher life. Religion has been fostered by the people of the State; art has been generously supported and the productions of the press, in newspaper and book form, have indicated the developed literary taste of the people.

The oldest religious denomination in Missouri is the Catholic church. Its establishment was synchronous with the commencement of the settlement of that part of the Louisiana Purchase which afterward became the Territory and then the State of Missouri. The earliest settlers were all Catholics, as witness the names of their colonies: Ste. Genevieve, St. Charles, St. Louis. The first named, the oldest town in the State, also enjoyed what was, so far as historical records go, the first religious service ever held in Missouri. It was conducted by a Jesuit Father, on February 29, 1760. The first Catholic, and therefore also the first Christian church, was built in St. Louis, in 1770. As early as 1818 the Right Rev. William Louis Dubourg, bishop of New Orleans, transferred his episcopal residence to St. Louis. The church now has in the State, besides maintaining an archiepiscopal see at St. Louis, three dioceses, with 591 priests, 306 churches, and 181 stations and chapels, with a Catholic population of 292,000 souls.

In 1799, thirty-nine years after the first Catholic service of which history tells, probably the first Protestant preacher who ever set foot west of the Mississippi visited what is now Cape Girardeau county and preached the gospel, "though contrary to law." This was the Rev. Thomas Johnson, of the Baptist denomination. In 1806 the first Protestant "meeting house" west of the great river was dedicated, Bethel Baptist church, now the Baptist church of Jackson, Missouri. In 1816 the first Baptist Association, of seven churches, was formed. The "General Association of Missouri Baptists" was organized in 1834, in Providence church, Callaway county. There are now in

For the  
higher  
life in  
Missouri.

Catholic  
the oldest  
religious  
denom-  
ination.

First pro-  
testant  
preacher.





FIRST  
BAPTIST.  
FIRST  
CHRISTIAN.  
FIRST  
METHODIST.

SISTERS OF MERCY  
HOSPITAL.  
CONGREGATIONAL.  
FIRST  
PRESBYTERIAN.

GROUP OF JOPLIN CHURCHES.

affiliation with this body 78 local associations, with 1,837 churches with a total membership of over 150,000. Their property is valued at \$2,700,000. Colored Baptists in Missouri have 110 ministers, 195 churches, and 13,154 members.

In 1814, Sunday, November 6, the first regular Protestant services were held in St. Louis, by the Revs. S. T. Mills and Daniel Smith, ministers of the Presbyterian church. On August 2, 1816, the Rev. Salmon Giddings, who had ridden 1,200 miles on horseback to reach his field of labor, organized the first Presbyterian church west of the Father of Waters, at Bellevue, with thirty members. On November 23, the following year, he organized the First Presbyterian church of St. Louis, the first Protestant church in the city. The first presbytery was organized in 1817, with four ministers and four churches. A synod was established soon. In 1838 a division rent the Presbyterian church throughout the United States into old and new school branches. In 1866 the old school synod in Missouri was again divided, on war issues. An independent synod was organ-

Presbyterians.  
enter the State.

ized, which in 1874, became organically connected with what is popularly known as the Southern church. In 1870 the old and new school synods became one body, in affiliation with the Northern church. In 1903 this synod had 200 ministers, 240 churches, and 24,000 members. Contributions for all purposes amounted to \$435,000. The Southern synod had 90 ministers, 163 churches, and 12,800 members. The total contributions were \$155,000.

In 1806 a conference of Methodist preachers in Greene county, Tennessee, appointed one Jno. Travis to the Missouri "circuit," to do what he could for the spreading and upbuilding of the gospel. At the close of his conference year he reported two circuits and 106 members. In 1816 the Missouri Annual Conference was

formed, with no western boundary. In 1820 this conference numbered fifteen preachers and 2,079 communicants. The decade between 1840 and 1850 witnessed the division of the church in the State by the organization of the M. E. church

south. The M. E. church now has three annual conferences, two white and one colored, with 700 white churches and 60,000 members. Church property is valued at \$2,000,000. The colored churches number 126, with a membership of 6,300. Their property is valued at \$175,000.

The M. E. church, south, has three conferences, about 400 ministers, 1,100 churches and 110,000 members. The value of the church property is above \$2,500,000.

GRACE METHODIST EPISCOPAL.

CALVARY PRESBYTERIAN.

METHODIST EPISCOPAL.

Presbyterian church statistics.



SOME SPRINGFIELD CHURCHES.



CHRISTIAN CHURCH, MARYVILLE.

Methodists in Missouri.

Episcopalian  
church in Mis-  
souri.

The African M. E. church in Missouri has 106 ministers, 144 churches, and 8,000 members.

The first service of the Protestant Episcopal church in the Territory of Missouri was held October 24, 1819, in the city of St. Louis. Christ church was organized in November of that year. In 1831 efforts were made in the interior of the State, but as late as 1835 there was but one organized parish, one church building, and not a single clergyman in the entire State. In 1836, with the arrival of the Right Rev. Jackson Kemper, missionary bishop, a favorable change occurred. At the end of that year five clergymen were at work. The diocese was



organized in 1840. In 1889 the diocese of west Missouri was set off. The denomination now has 100 churches, with 11,930 members. The contributions for all purposes amounted, in 1903, to \$159,000. The church property is valued at \$920,000.

#### SOME KANSAS CITY CHURCHES.

The first preachers of the Disciples, or Christian church, in Missouri, were Elders Thomas McBride and Samuel Rogers. They entered the State about 1820. During the following ten years many pioneer preachers arrived and did effective work in different portions of the State. The first churches were organized in Callaway, Boone, and Howard counties, between 1825 and 1830. The first church in St. Louis was not organized till 1836, with about a dozen members. From these beginnings the denomination has rapidly grown until it now numbers 690 ministers, 1,700 churches, and 175,500 members.

Disciples in the  
State.



INTERIOR CATHOLIC CHURCH, CONCEPTION.

Cumberland  
Presbyterians.

The first Presbytery of the Cumberland Presbyterian church west of the Mississippi was erected in Pike county, in 1820, with four ministers, all who then lived in Missouri, Arkansas, and western Illinois. There are now 398 churches, 186 ministers, and 28,868 members. The contributions in 1903, for all causes, summed up \$119,751. The church property is valued at \$694,220.

Lutherans.

In 1839 a colony of some 600 persons arrived in St. Louis, direct from Bremen, Germany, under the direction of Martin Stephan, a Dresden preacher. A tract of land was purchased in Perry county, and the emigrants went into camp and began to build up a number of German colonies. Here, under the controlling influence of Carl Ferdinand Wilhelm Walther, the real father of the Lutheran faith in America, the foundations of this church were laid broad and deep in the new world. In 1847 "The German Evangelical Lutheran Synod of Missouri, Ohio and other States" was organized, with twelve congregations and twenty-two ministers. It now has 125 ministers, 140 churches, nearly all with parsonages and parochial schools, and 30,000 communicants.

Congregation-  
alists.

INTERIOR PRIMARY DEPARTMENT ROOM, SUNDAY SCHOOL, CONGREGATIONAL CHURCH, PIERCE CITY

The Congregationalists, by a curious irony of Providence, did not secure a footing in Missouri until



HOME OF WILLIAM R. NELSON, PROPRIETOR KANSAS CITY STAR.

some time during the latter part of the first half of the nineteenth century, about 1855, although most of the early Presbyterian missionaries were sent to Missouri by the New England Congregational Associations. Compared with some of the older churches the growth, however, has been rapid. The denomination now numbers, in the State, 79 ministers, 76 churches, and 10,419 members. The contributions for all causes, in 1903, amounted to \$171,651.

German Evan-  
gelical.

The German Evangelical church, in Missouri, is to the manor born. It was in the neighborhood of St. Louis that the first German Evangelical missionaries began their work in this country, and it was at Gravois, on the fifteenth of October, 1840, that the first German Evangelical Association of the west was organized, with seven ministers. The denomination now numbers, in the State, 103 ministers, 107 churches, 84 parochial schools, and 85 parsonages, and has a list of over 20,000 communicants.

Other denomi-  
nations.

In addition to these larger bodies, there are about 30 smaller denominations represented in Missouri. The latest available statistics supply the following information about them: There are seven Baptist bodies—Seventh Day, with one organization and 13 members; Free Will, 108 churches, 4,752 members; Primitive, 129 churches, 3,763 members; General, 166 churches, 6,654 members; Two-Seed-in-the-Spirit Predestinarian, 32 churches, 668 members; United, 45 churches, 2,738 members; Church of Christ, four churches, 185 members. The Plymouth Brethren have 10 organizations and 398 members. Christadelphians, two churches, 20 members. Christian Scientists, 12 organizations and about 600 members. The Independent Churches of Christ in Christian Union is a denomination with 56 churches and 3,926 members. The Church of God has seven organizations and 221 members. The Church Triumphant has one organization with 20 members. The Church of the New Jerusalem (Swedenborgian) has five organizations, with 309 members. The Altruists, a native Missouri organization, boasts one church and 25 members. The Dunkards have 44 churches and 2,090 members. The Evangelical Association has 26 churches and 1,102 members. The Friends (Quakers) have five organizations and 615 members. The German Evangelical Protestants have only two churches, but 1,700 members. The Menonites number 15 churches and 748 communicants. The United Presbyterians have 14 churches, 1,068 members. The Reformed church has 11 organizations and

586 members. The Universalists have 16 churches and 711 members. Spiritualists have five organizations and 853 members. The United Brethren in Christ have 105 churches and 4,361 members. Unitarians have six churches, with 1,135 members. The Ethical Society has one organization, with 150 members. Jews have 17 synagogues and 4,450 members. Latter Day Saints have 42 organizations, with 3,189 members.

The extent of the Sunday School work for the children and youth of Missouri is revealed by the following figures, taken from the reports of the Missouri Sunday School Association: In 1903 there were 6,718 Sunday Schools in the State, with 66,344 officers and teachers, and 507,097 scholars. In the Home Department 64,369 more were enrolled, making a grand total of 571,466. In the year 1902, out of a Sunday School population of 969,482 in the State, 560,352, or 57.7 per cent, were enrolled as pupils in the schools. The thoroughness with which this work is carried on, the completeness of State and county organization, is shown by the fact that in a number of counties in 1902—to be accurate, 11 of them, Adair, Audrain, Clinton, DeKalb, Holt, Livingston, Moniteau, Nodaway, Polk, Scotland, and Shelby—there were more pupils in the Sunday Schools than school population in the counties. Nodaway county, for instance, with a school population of only 10,034, had 11,555 pupils in its Sunday schools. Livingston county, with a school population of 6,386, had 7,485 enrolled. In other words, not only the children, but many adults, were gathered together for systematic Bible study. The most thoroughly organized county in the United States along Sunday School lines is Lawrence county, Missouri. The largest Bible class in the United States, in proportion to the population of the town is in Missouri.

One would naturally think the west too new for an art, but the truth is Missouri had artists years ago. She has been particularly fortunate in possessing

at least one man, George C. Bingham, who has preserved her types of his day on canvas. As time goes on the works of Bingham will be of more value as records not only of former customs but of the old time hospitable Missourian himself. Though living at a time when American art was very poor in technical equipment, Bingham managed to acquire sufficient skill to portray, in a fairly powerful manner, the spirit of his age. An intelligent and keen, as well as a sympathetic observer of the life around him,

CHRISTIAN CHURCH, KIRKSVILLE.

he has left some priceless contributions to American art and history. On canvas after canvas he painted the portraits of his contemporaries but it is for his original compositions that we of today are especially indebted to Bingham. These compositions having as subjects the



The Sunday School work in the State.



MONUMENT TO RICHARD P. BLAND, LEBANON.



Modern art.



OFF SCHEVENGEN—HARRY CHASE'S MOST FAMOUS MARINE PICTURE.

various public events of the day—the "County Election," etc., are remarkably faithful delineations of life in early Missouri.

St. Louis Art  
School.

Among the pioneer art schools of the west a prominent place must be given the St. Louis Museum of Art School, founded by Halsey Ives and at present splendidly housed—thanks to the efforts of the founder. It was the starting point for many artists who have continued their studies in the east or in Europe. Some of America's best art workers call this school their alma mater. The Art Club of Kansas City maintained a successful school of art in that city for a number of years until a fire destroyed their collection and disbanded the school. Since then private enterprise has kept one or two schools of art going. The University of Missouri at Columbia, has offered courses in the history of art for sometime and has recently opened a department of drawing and painting with free tuition.

Missouri rich in  
private art  
galleries.

Missouri is rich in art collections for a western State, and, besides both public and private galleries of modern work in her cities, possesses reproductions of the great art of the past. Such collections of reproductions are invaluable for the general dissemination of art knowledge as well as to those studying art, whether art student, child, or club member. Fortunately the various collections in the State do not simply repeat each other. The St. Louis collection of casts from Greek and Roman sculpture contains many not found in the Uni-

versity of Missouri collection and vice versa. The painting of the Renaissance is illustrated by the collection of photographs and the gallery of copies in color presented to the Western Art Gallery, Kansas City, by Mr. Nelson and by the photographs and large collection of lantern slides at the University of Missouri.

What the art of any country is, however,

Y. M. C. A. BUILDING,  
JOPLIN.

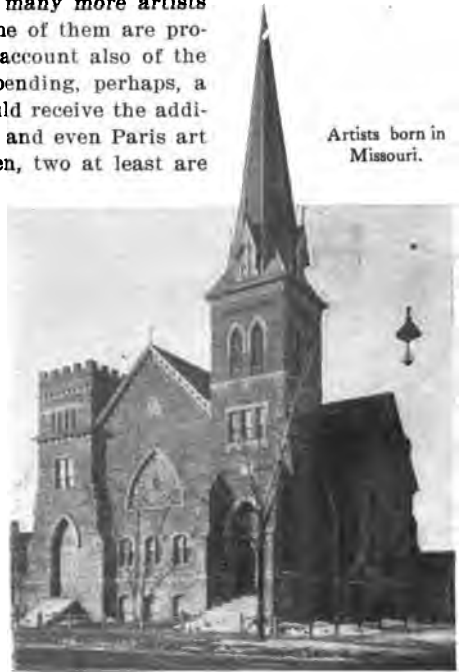


must depend chiefly on her artists. Missouri has many more artists than might seem probable on first thought and some of them are producing valuable and interesting work. If we take account also of the men born in Missouri who now live elsewhere, spending, perhaps, a part of their time in their native State, the list would receive the addition of some of the best known names in New York and even Paris art circles. At St. Louis, among a number of good men, two at least are painting nature in a very individual and poetic manner while another is doing successful mural work. Flourishing art societies are maintained and exhibitions given regularly. Kansas City has one of the strongest draughtsmen in the west besides several good painters. Its art club is a very successful organization, giving yearly exhibitions from which the club purchases at least one canvas destined for Kansas City's permanent gallery. In various parts of the State, sometimes in the most unexpected places, are scattered painters or sculptors who have given years of study to their work and whose influence will tell for great good in the end. It is perhaps a misfortune that the people of Missouri are very much like other Americans in that one still finds those who willingly spend liberally for floor coverings and furniture but hang chromos on their walls. Some day it will be realized that serious studies by the State's best artists make splendid wall hangings and then the art workers of Missouri will be sustained by an impetus to produce their best that only such practical recognition can supply.

To produce a great national or State art there must be not only artists and museums but an art loving public as well. In this respect Missouri is acting wisely in placing art as one of the every day studies in her great school system from which must come her future citizens. In city and country school the importance of drawing is at last realized and the child is brought face to face with nature, taught to observe carefully, and then to reproduce what he sees. The model may be a little flower or some fruit or even a boy or girl and the child uses pencil or color as the case may demand. The children are

An art-loving public.

Artists born in Missouri.



M. E. CHURCH, SOUTH, MOBERLY.



M. E. CHURCH, SOUTH,  
KIRKSVILLE.

also encouraged to produce original work that by doing so they may learn the characteristics of good art and so have their own taste cultivated. It is extremely necessary for our State and national growth that the taste of our children should be developed for that which is strong, simple and forceful rather than for that which is



PRESBYTERIAN CHURCH,  
KIRKSVILLE.

extravagant and ornate. The collections of the art of the past can be made of great benefit in this regard, especially when the child can be introduced to them by an intelligent sympathetic and patient interpreter such as one finds, for example, in Mrs. Helen Parsons, the curator of Kansas City's gallery.

Fortunately the art work of the schools has not stopped in the grammar grades but has reached a natural and splendid development in the better



high schools of the State. Many of Missouri's best art workers are now giving part of their time to instructing the pupils of the secondary schools with results

that well repay their efforts. Taken all in all Missouri has a good foundation on which to build a noble, distinguished art if each one does his share toward the whole—only so can anything lasting be accomplished.

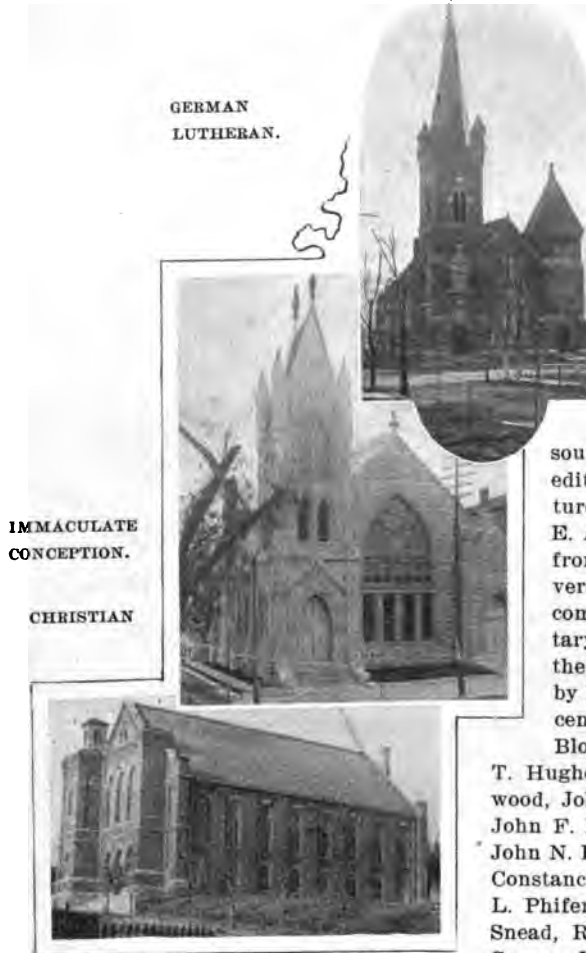
The writings of Missouri authors have more than a State or national reputation. The greatest American humorist, Mark Twain (Samuel L. Clemens) was born in Monroe county, Missouri, and grew to manhood in this State. In Missouri was born and educated the children's poet, Eugene Field, and here he did his first literary work. The most popular historical novel of recent years is by a Missourian, Winston Churchill, and has its scene laid in Mis-

souri. The "Little Book of Missouri Verse," edited by J. S. Snoddy and "Missouri Literature," edited by President R. H. Jesse and Dr. E. A. Allen, contain the names and extracts from the excellent works of Missouri authors in verse and prose. The Missouri Bibliography, compiled by F. A. Sampson, of Columbia, secretary of the State Historical Society, contains the titles of one thousand five hundred volumes by Missourians. Among them are William Vincent Byars, William Marion Reedy, Henry M. Blossom, George W. Ferrel, E. R. Taylor, John

T. Hughes, Col. William F. Switzler, J. M. Greenwood, John D. Lawson, Frank Thilly, W. V. N. Bay, John F. Darby, Alexander Majors, R. E. Lee Gibson, John N. Edwards, Raymond Weeks, Hugh A. Garland, Constance Faunt Le Roy Runcie, W. R. Hereford, C. L. Phifer, Lee Merriwether, W. P. King, Thomas L. Snead, Robertus Love, Claude H. Wetmore, F. H. Sosey, L. W. Allen, Champ Clark, Kate Field, James K. Hosmer, John R. Musick, James Newton

Baskett, W. T. Moore, J. H. Garrison, E. A. Allen, R. M. Field, W. R. Hollister, Harry Norman, D. C. Allen, N. C. Kouns, J. W. Buel, C. M. Woodward, Henry Tudor, D. R. McAnally, E. R. Hendrix, Ernest McGaffey, and Denton J. Snider.

Missouri newspapers are well-edited, widely-circulated and influential. There is no county without a daily or weekly newspaper. Every shade of political, social, and religious thought is represented. In 426 cities, towns and villages are published the 992 newspapers and magazines of the State. Of these, 87 are daily, 14 semi-weekly, 746 weekly, 4 fortnightly, 10 semi-monthly, 119 monthly, 3 bi-monthly, and 9 quarterly. The Missouri Gazette—now the St. Louis Republic—is the oldest Missouri newspaper. Its publication dates to 1808. The Palmyra Spectator is the oldest weekly newspaper continuously in one family.



SOME HANNIBAL CHURCHES.

Some Missouri authors.

The newspapers of the State.



BAPTIST CHURCH, KIRKSVILLE.



# FAUNA



**W**ITH its extensive water frontage, washed as the State is along the entire stretch of its eastern border by the Mississippi river, traversed from west to east by the Missouri and furrowed by innumerable lesser streams, the fisheries of Missouri demand first consideration in an examination of the fauna of the State and its economic value.

The Mississippi river and its tributaries constitute the most extensive river system in the United States and embrace many large streams which are not only of value as water highways but are of the utmost importance on account of their fisheries. In recent years the fisheries of this great system have developed to such a degree that they now exceed in quantity and nearly equal in value the entire yield of the remaining interior waters of the United States, with the exception of the Great Lakes. The most important products are buf-

falo fish, catfish, and German carp, while mussel shells, which are used quite extensively in the manufacture of pearl buttons, furnish an item of no small value.

Where the fisheries are conducted.

The fisheries of Missouri are conducted chiefly in the Mississippi river, although fishing for the market is carried on to a considerable extent in the Missouri river, St. Francis river, Little river, Big Lake and in various other waters, especially the lakes and streams of the southeast.

In the year 1899 according to the United States Fish Commission there were employed in their fisheries 1,531 persons, and the value of the total invest-



ON THE NIANGUA RIVER.

ment represented by boats, apparatus for catching fish, or seines, nets of all kinds, lines, traps, etc., shore property and capital used in the fisheries, amounted to \$645,671. The total product of the fisheries for that year was 7,551,442 pounds, the value of which was \$211,301. More than half of this quantity was obtained from the Mississippi river alone. The various kinds of appara-

Investment in fisheries.

tus commonly used, and the quantity and value of the products obtained with each were as follows: Seines yielding 1,655,514 pounds, \$52,302; fyke nets, 1,530,103 pounds, \$49,189; trammel nets, 843,686 pounds, \$25,420; and set and drift lines, 888,977 pounds, \$35,831. The species of fish and other animals which contribute most extensively to this result were buffalo fish, 1,862,226 pounds, \$44,743; catfish, 875,050 pounds, \$40,755; frogs, 237,600 pounds, \$29,313; black bass, 394,336 pounds, \$20,362; crappie, 358,913 pounds, \$18,310; and suckers, 495,307 pounds, \$14,181. The remainder was made up of German carp, mussel shells, fresh-water drum fish, paddle fish, sturgeon, sunfish, otter skins, pike perch, turtles, white and rock bass, pike and pickerel, lake sturgeon, eels, and mooneys, in the order of their value.

Output from fisheries.

TABLE SHOWING, BY WATERS, THE NUMBER OF PERSONS EMPLOYED IN THE FISHERIES OF MISSOURI.

WATERS	FISHERIES IN WHICH EMPLOYED										BASKETS	SHOREMEN	TOTAL, EXCLUSIVE OF DUPLICATION
	SEINE	TRAMMEL NET	FYKE NET	SET LINE	DRIFT, HAND LINE, AND GRAPNEL	SPEAR	GUN	OTTER TRAP	POUND NET	CROWFOOT LINES, FAREES			
Mississippi River	161		207	162	36					121	2	359	814
Missouri River	111	21	145	161								47	334
St. Francis River	3	14	20	34	42	88	58	35					97
Little River, Big Lake	38	42	24	60	66	106	56	46	8				100
Swamps and Lakes	69	39	10	59	4	80	80						186
Total	382	116	406	476	148	274	194	81	8	121	2	406	1,531

The entire investment in the fisheries, amounting to \$645,671, is distributed among the waters of the State as follows:

Mississippi river .....	\$508,695
Missouri river .....	115,859
St. Francis river .....	6,224
Little river and Big Lake .....	8,513
Swamps and Lakes .....	6,380

Total .....\$645,671

It will be seen from this comparison that by far the greater part of the money invested in the fisheries is to be found in the industries along the Mississippi river, and although this is chiefly due to the greater value of the store-property, amounting to \$261,639, belonging to the mussel fisheries, it also indicates that the other waters of Missouri have not been exploited as fully in respect to their fisheries as the Mississippi river which alone yields more than half of the products obtained in the entire State. It can not be doubted a valuable field lies open for the extension of fisheries into other waters which are as yet but poorly developed.

Mussel-fishing  
of largest value.

An examination of the yield of the more important waters with respect to the products of the fisheries is of especial interest as indicating the relative distribution throughout the State of those species of animals on which the fisheries mainly rely.

TABLE—YEAR'S YIELD OF MISSOURI FISHERIES, WITH RESPECT TO WATERS.

WATERS	BLACK BASS lbs	BUFFALO FISH lbs	GERMAN CARP lbs	CATFISH lbs	CRAPPIE lbs	DRUM lbs
Mississippi River	4,246	763,386	417,980	347,479	9,091	114,255
Missouri River	1,210	235,220		171,845	8,487	70,040
St. Francis River	105,000	160,600	1,000	111,300	79,000	985
Little Riv., Big Lake	262,000	584,000	6,220	189,400	239,300	4,625
Swamps and Lakes	21,180	119,020	28,050	55,026	23,035	7,460
Total	394,336	1,862,226	453,250	875,050	358,913	197,365

WATERS	EELS	HICKORY SHAD	MOONEYE	PADDLE FISH	PIKE	PIKE PERCH
Mississippi River	3,256	450	4,195	106,576		4,491
Missouri River	855			57,875	1,900	10,090
St. Francis River	800			700	2,350	615
Little Riv., Big Lake	2,900			6,100	13,900	2,442
Swamps and Lakes				19,680	1,150	195
Total	7,811	450	4,195	190,931	19,300	17,833

WATERS	ROCK BASS	STURGEON, LAKE	STURGEON, SHOVELNOSE	SUCKERS	SUNFISH	WHITE BASS
Mississippi River	3,560	7,269	75,810	67,652	1,840	760
Missouri River		1,950	74,720	77,055		440
St Francis River	2,025			12,000	31,000	
Little Riv., Big Lake	9,070			77,930	93,830	
Swamps and Lakes	1,170			260,670	4,850	
Total	15,825	9,219	150,530	495,307	131,520	1,200

WATERS	TURTLES	FROGS	MUSSEL SHELLS	OTTER SKINS	TOTAL BY WATERS lbs	VALUE
Mississippi River	32,219		2,084,000		4,048,515	\$ 67,527
Missouri River					711,687	32,110
St. Francis River	1,300	72,300		394	581,369	26,753
Little Riv., Big Lake	10,300	91,104		368	1,594,189	57,372
Swamps and Lakes		74,196			615,682	27,539
Total	43,819	237,600	2,084,090	762	7,551,442	211,301

Year's yield of  
Missouri waters.

Several facts of interest are apparent after an examination of the above statistics. All of the products given with two or three exceptions were obtained in the Mississippi river, while some for example, the buffalo fish, German carp and mussel shells were caught in very large quantities. The yield of the St. Francis river was not far behind that of the Missouri in bulk, but it represented a greater diversity of forms. The fisheries products of Little river and Big Lake exceeded in quality and nearly equalled in value the total output of the St. Francis and Missouri rivers combined, while miscellaneous lakes contributed a not considerable amount to the entire world. It is also worthy of notice that the mussel fisheries are confined to the Mississippi river, in part at least due to the greater accessibility of the mussel beds of that stream to the market.

The result of the comparison of the waters of the State shows clearly that as contrasted with the Mississippi the other rivers are not yielding their proportionate share of the products of the fisheries, and undoubtedly these streams, with

proper protection, are capable of a much greater development.

There are eight wholesale fish establishments in St. Louis with an aggregate business of \$1,450,363, and seven in Kansas City with a business of \$436,597.

The Missouri Fish Commission, with hatcheries at St. Joseph and St. Louis and the United States Fish Commission with hatchery at Neosho have done much to keep Missouri waters well stocked with fish.

The mussel fisheries of Missouri produced in a single year, 2,084,000 pounds of shells. The value of these shells, which were landed principally at Hannibal, Canton, and La Grange was \$9,217, although this figure includes two pearls

Comparison of  
various streams.

With proper  
protection a  
greater develop-  
ment.

Mussel shells.



ON THE OSAGE RIVER.



IN SWIFT RIVER CAMP.

valued at \$135, which were found in the shells. The shipment of shells from Hannibal alone amounted to thirty car loads of 50,000 pounds each, its shells being sold at from 40 to 75 cents per pound, according to the variety.

The manufacture of pearl buttons from the shells of our native fresh-water mussels taken in the Mississippi river is of comparatively recent date, having

Pearl button  
factories.



A VIEW ON THE BEAUTIFUL MERAMEC RIVER.

been first undertaken in 1891 at Muscatine, Iowa. During the next four years the business developed into an industry of considerable proportions in several States.

Industry of consid-  
erable impor-  
tance.



FLOATING FISHING ON THE BIG PINEY RIVER.



SHOOTING FROM "DUGOUT" ON ST. FRANCIS RIVER.

There are six factories in Missouri, employing 121 persons in 1899, and producing 50,000 gross of buttons and 164,400 gross of button blanks.

Utilization  
of mussels of  
various kinds.

Although there are some 400 species of mussels living in the Mississippi river and its tributaries, very few can be utilized in the manufacture of buttons, because not all by any means possess the necessary qualifications. Only those shells are serviceable which after the waste of grinding a considerable amount are still of the requisite thickness for buttons. The shells of many species are too soft or too brittle and will crack and split in the process of cutting and grinding; and, again, the shells must present a uniform color, which is preferably white, since the pink, purple and other colors are liable to fade. Dead shells which have lain a long time exposed to air or water become useless for button making.

Common forms  
which are used  
for button-  
making.

The species in most common use on the Mississippi river is the so-called "niggerhead," *Quadrula ebena*, which has a very thick shell and is uniformly glistening white on the interior. A few other species pass muster at the hands of the button-makers, and ranking next to the "niggerhead" among the commoner forms are those known along the Mississippi as "sand shells," which, however, include several different species of mussels, as, for example *Lampsilis anadontoides*, *L. rectua*, and *L. fallaciosus*. The popular name arises from the fact that these forms are found chiefly on sandy bottoms. Several additional species yield good buttons, but they are generally scarce, and in Missouri nearly all of the shells obtained in the mussel fishery are "niggerhead" and "sand shells." The habitat of the mussel is of course not confined to the Mississippi river and many of the tributaries contain good button varieties, but owing chiefly to the absence of local demand, beds in these streams are rarely fished.

Diversified fauna.

Missouri with its rolling prairies, its belts of timber and its varied waters, has all the natural pre-requisites of a most diversified fauna, and as a home for fauna could be surpassed by no State in the middle west. But, as a result of the sure extermination that follows upon the heel of civilization, much of the game that once so abounded in the State, has passed into history.



FISHING ON WHITE RIVER, TANEY COUNTY.

The Virginia deer, our most conspicuous game mammal, once common in many parts of the State, is now confined to a few of the southern and southeastern counties, when it occurs in relative abundance, and in favorable localities is said to be increasing. The forests of this region are free from undergrowth and, therefore, afford little natural shelter for the larger mammals, but the deer have in recent years been securing an artificial means of concealment in districts where lumbermen have left masses of tree tops and branches on the ground after cutting out timber. It is quite possible that the reputed increase of deer is mainly due to this fact, which is probably also responsible for the growing invasion of similar regions by wolves from the farther-west.

Deer increasing  
in some sections

Black bear  
almost extinct.

In the extreme southeastern counties the black bear appears as an occasional straggler from Arkansas, and on the streams and lakes of the same section the beaver may still be found in small numbers. The cougar, variously called mountain lion, puma or panther, is found now but very rarely even in the wildest and most unsettled districts. This is also true of the wild cat, or catamount, once so common, but now restricted by civilization to thinly settled sections.



A GROUP OF MISSOURI 'POSSUMS.

The red fox, that prince of cunning, is quite numerous. The less shrewd gray fox is found in smaller numbers.

The raccoon and opossum are familiar inhabitants, and the rabbit or cotton-tail, in spite of the enormous destruction which yearly takes place in its ranks, is astonishingly abundant. The gray squirrel, and the woodchuck, or groundhog, famous for his long winter sleep, are numerous. The muskrat,

Foxes, raccoons  
and 'possums.



whose fur when dyed is frequently sold under the name of "electric seal," is in evidence whenever water occurs.

Among the carnivora, or flesh-eating mammals, which have not already been mentioned, are the otter, not infrequently found on certain streams.

Situated immediately in the tract of the great migrations which annually take place through the Mississippi valley, it is not surprising to find that Mis-

souri possesses a wonderfully rich bird fauna. In addition to the residents, thousands of birds pass through the State in their journeys to and from the more northern latitudes. Geese and ducks, as visitors, are numerous and afford excellent shooting on the more favorable waters, but the game bird *par excellence* is our American quail or bobwhite. The wild turkey is still found in the southwestern counties, and the ruffed grouse,



Rich bird fauna.

A MORNING CATCH, HOLT COUNTY.

known as the partridge or pheasant, occurs in less disturbed wooded districts.

The prairie chicken, abundant at an earlier day in the northern section of the State, is here as elsewhere practically a bird of the past, so carefully has the market hunter performed his exterminating work.

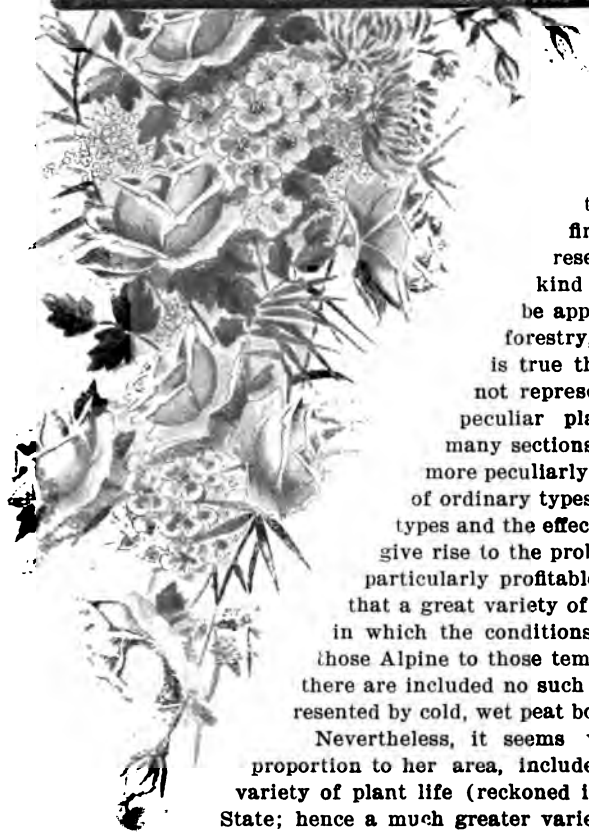
Snipe, plover, woodcock and other minor game birds are plentiful in suitable localities.

Missouri possesses a rich and diversified fauna, diminished of course through the progress of civilization and the absolute slaughter by the market hunter, but susceptible of preservation by care and wisdom. The future of the game and food animals and fish of Missouri depends in the main upon the interest which can be aroused throughout the State in the efforts to stay the destruction by the enactment of rational fish and game laws and the securing of adequate means for their enforcement.

**Game Laws.**—Unlawful to kill deer between January 1 and October 1, to kill any wild song bird or insectivorous bird at any season of the year, or to disturb the nests of such birds, or take therefrom any eggs. Unlawful to kill any turkey, Chinese pheasant, pinnated grouse (prairie chicken) or ruffed grouse (commonly called pheasant or partridge) or any quail (sometimes called Virginia partridge) between January 1 and November 1, or any woodcock, turtle dove, meadow lark or plover between January 1 and August 1. Unlawful at any time or season to catch, take or injure by means of nets, traps, pens or pits or other device any kind of game as herein described, and any person who shall kill any wild duck between April 1 and October 1 or who shall ensnare, trap or kill by means of any explosives any wild goose or turkey, or who shall shoot or kill the same between sunset and sunrise by means of gunpowder or other explosives of other kind shall be guilty of a misdemeanor. This does not apply to any person who shall ensnare, trap or net wild geese or ducks on his own premises for his own use. Unlawful for nonresidents to kill or trap game. Shipment of same outside of State not allowed.

Prairie chicken,  
snipe and plover.

Game laws.



# PLANT LIFE

**W**HEN the plant life of Missouri shall have been well studied

State fine field for botanical research.

the State will be ranked among the first of the fields for close botanical research, and particularly for that kind of botanical research which may be applied to the interests of agriculture, forestry, and other industrial pursuits. It is true that the plant life of Missouri does not represent so many highly specialized or peculiar plant forms as that characterizing many sections of the country which happen to be more peculiarly situated. An extraordinary variety of ordinary types is to be found; and this variety of types and the effects of the local conditions upon these give rise to the problems which make botanical studies particularly profitable. At first glance it seems strange that a great variety of forms should characterize a region in which the conditions of temperature do not vary from those Alpine to those temperate. Moreover, within the State there are included no such diverse plant habitats as those represented by cold, wet peat bogs or dry and shifting sand plains.

Extraordinary variety of types.

Nevertheless, it seems very probable that Missouri, in proportion to her area, includes within her borders as great a variety of plant life (reckoned in number of species) as any other State; hence a much greater variety than the majority of the States

even with more varied conditions. In order to properly understand the plant life with relation to the environment, it is necessary to recall the important factors of the environment. All general physiographic and climatic factors must be taken into consideration in analyzing plant adaptations.

Missouri lies south of the great prairies of Iowa, and east of those of Kansas. She is, therefore, most fortunately situated to receive additions to the flora through the migration or seed dissemination of the typical prairie plants. The Mississippi river, forming her eastern border, brings the State in touch with the whole Northern central basin which this river drains. Crossing the State from the northwest to the central east, the Missouri river brings down from the prairies and plains, from the northwestern woodlands, and even from the western slopes of the Rocky Mountains, the plants characteristic of those regions. The Ohio River becomes confluent with the Mississippi opposite a point about thirty-five miles north of the southern boundary of the State; and thus a bond of union is effected with the whole Ohio Valley, the western slopes of the eastern mountains, and also through the Tennessee River with the States as far south as Alabama. This brings to the southeastern border plants of practically the whole Appalachian system. Through the Ozark Hills direct connection is had with the mountain vegetation of Arkansas and with a certain ridge vegetation in Tennessee and Alabama. Lastly, there is indirect connection through persistent winds, with the great southwest and its typical prairie and arid vegetation. From these brief references to the general position of the State, physiographically and geographically, it will be very evident that the native flora of Missouri must be made up in part of elements representing an unusual stretch of country, as well as a great variety of floral covering. Moreover, these various elements in the flora are constantly strengthened, and may not be annihilated by accidental conditions.

The climatic conditions in Missouri are different north, east, south, and west. More or less local conditions may be said to prevail in the northwest, southwest and southeast. The rainfall is greatest throughout the southern portion of the State, and somewhat less rain falls in the southeast than in the southwest. This is particularly true with reference to the growing period, and, therefore, the difference is emphasized. From year to year the date of the last killing frost does not seem to vary within very wide limits in different parts of the State, although the northwest is often a week later than the central portion. The first frosts in autumn are also earlier in the northwest as a rule. Aside from these conditions of temperature and rainfall, two others of less importance may be mentioned, those of light and wind. The light factor, while absolutely essential for the growth of green plants, does not need special consideration with reference to Missouri conditions, since, in general, the conditions conform to those characteristic of the whole country. Light-loving, heliophilous, and shade-loving, umbrophilous, plants are, of course, characteristic of our flora, and naturally seek exposure or shelter as their needs demand. The wind factor is also comparatively unimportant. Composite plants, however, whose seeds are for the most part so light and feathery as to be blown great distances, find an easy method of dissemination through the State and the impress of the southwest is strongly felt throughout western and central Missouri.

Entering the State from the northwest and traveling southeastward to the border, one passes through successive regions in which the general floral covering changes several times. The true prairie vegetation of the northwest grades into a central region of unusual heterogeneity where, indeed, northern, western, southern and southwestern plants contend constantly among themselves for the mastery. In the Ozark plateau the flora seems to be of a type with some distinctly Appalachian elements, but with many peculiarities common to that of the extension of this ridge into Arkansas, Tennessee, and Alabama; and, finally, in the southwest there is a flora more closely resembling that of the southern alluvial formations.

Missouri flora  
made up of  
many elements.

As to climatic  
conditions.

Change of the  
general flora.



THE PROCESS OF TRANSFORMATION FROM WOODED HILLSIDE TO BLUE GRASS PASTURE.

In order to view the general floral features from the point of view of the economist, one may for the moment leave out of consideration all minor characters of the plant associations in order to fix the attention upon the two great popular floral sub-divisions, forests and prairies—sylvan and campestral types. The general forest vegetation of the State is to be found in the region characterized by a soil of residuary limestone, and, in addition, along the valleys of nearly all streams. These are the typical forest regions, yet changes which are now being wrought by the pursuits of men serve in the main to encroach upon the territory of the forests and further to expand those areas with campestral affinities.

General forest  
vegetation.

It must not be supposed that soil features alone separate the plant life into prairie and forest vegetation. As a matter of fact, any exposed or high area, if of considerable extent, may become a prairie. In such areas, forest fires find nothing to check them when once they have begun to make headway, and any such exposed piece of land of sufficient area may, after being burned over, grow up as a typical prairie. It is thus that in certain sections of the true Ozark regions distinctive prairies have arisen, and in due course of time these have again been supplanted by forests.

Prairies and  
forests.

The North American continent is divided into three main regions, a boreal or northern, an austral or great central, and a tropical, or far southern. The lines marking these regions are all deflected, of course, by the positions of mountain ranges. The central portion of this austral region, known as the upper austral zone, occupies much of the central portion of the country. The eastern humid section of this zone, known as the Carolinian area, skirts the Alleghenies on the east and south, cutting through many States on the Atlantic border, and it extends westward from West Virginia and Kentucky to the one hundredth meridian. This area includes besides (1) small section of many of the Atlantic and Gulf States, (2) nearly the whole of Ohio, Kentucky, Indiana, Illinois, Missouri, Iowa, and Kansas, a large portion of Nebraska, South Dakota, Oklahoma, and Arkansas, and (3) small areas in other bordering States throughout this general region. This would mean that so far as temperature is concerned we might predicate the successful growth in Missouri of any plant species of this whole area, as well as of many plants common to several areas; for, as a matter of fact, some plants are quite independent of mean daily temperatures, and are not conformable to such a single-factor category. Aside from the heat or temperature factor, there are other important climatic relations of the plant, relations as to rainfall, light and wind.

The upper  
austral zone.



THE CYPRESS (*TAXODIUM DISTICHUM*), THE DOMINANT GROWTH IN THE CYPRESS SWAMPS.

More important, however, to the life of a plant is usually the relation to the soil, or the substratum, the so-called edaphic relation. This latter relation is three fold, and may refer in special cases to the moisture content of the soil, and always refers to the physical constitution and to the chemical content of the soil. Of these various relations the former is perhaps the most important of all factors governing the distribution of plants within any region. It is often largely dependent upon rainfall, and then becomes, for all practical purposes, a climatic factor.

In recent times the above fact relating to the importance of moisture in the distribution of plants has been well recognized, and those who have in our time done most for the study of plants in their environments have made use of this important relation to water content in arranging plants in groups according to their natural preferences of habitat. These groups, with more or less common and constant affinities, are termed plant formations. In applying these groupings to a study of the vegetation of this State, the plants of Missouri may be divided into the following formations:

First. Hydrophytes, consisting of aquatic or sub-aquatic plants, that is, those whose habitat is either the water or water-soaked substrata.

Second. Mesophytes, those requiring or electing a medium degree of soil moisture and a medium humidity, this group making up the great bulk of our species.

Third. Xerophytes, are those plants which prefer to grow or may grow in a dry atmosphere, and in a soil or situation furnishing but little moisture.

In this State, moreover, it is well to distinguish at least one other:

Fourth. Rupestrine, including those plants growing upon cliffs and ledges under a great variety of conditions of moisture.

The above subdivisions refer largely to the flowering plants and to the ferns and fern allies, not attempting to include, except in a general way, the lower cryptogams.

Our typical aquatic flowering plants are few, and this is doubtless due to the scarcity of lakes and ponds in the State. For the most part, the ponds are artificial, and the plants which are found in these habitats are generally species of very wide distribution, such, for instance, as a few species of the small floating duckweeds (*Lemna* and *Spirodela*), pondweeds (*Potamogeton*), the common hornwort (*Ceratophyllum*), the Chinquapin water lily (*Nelumbo*), and the waterweed (*Philotria*). As characteristic amphibious plants we have a large number, such, for instance, as the water plantain (*Alisma*), arrowhead (*Sagittaria*), cat-

Importance of  
moisture in  
plant distribu-  
tion.

Missouri plants  
as to formations.

tail (*Typha*), bur reed (*Sparganium*), wild rice (*Zizania*), and other grasses and sedges. On the mud flats of our streams, in wet woods, swamps, and in other such situations are to be found numerous other species of sedges, such composites as certain tickseeds (*Coreopsis*), also water peppers (*Polygonum*), rag weeds, etc. As a truly amphibious plant, confined, however, to the southeastern portion of the State, might be mentioned the well known cypress (*Taxodium distichum*), a tree of great scientific and economic interest. This tree is the dominant growth in the true cypress swamps. Its wonderful "knees" and thickened trunk bases have long afforded interesting topics for physiological speculation. Again, along the borders of streams, are to be found as typical riparian plants, a few willows (*Salix*) and birches (*Betula*), the plant tree (*Platanus*), as well as many herbaceous plants.

In the cypress swamps.

On the whole, it is noticeable that Missouri streams do not commonly abound with aquatic plants, although the willow weed (*Dianthera*) is fairly common as a stream-bed plant throughout at least a portion of the State. The water cress (*Nasturtium*) is also found filling those streams carrying more or less clear or spring water in many portions of the State.

Aquatic plants.

Without special reference to the moisture content of the soil, the mesophytic flora may be divided into two types—the sylvan or forest type, and the campal, or grass-herbaceous type of prairies and clearings. These two types include innumerable plant associations and so many species that very little can be said of them in detail. The forest vegetation throughout the State may be divided into upland and lowland types. The upland type includes, as most common representatives in the northern and central portions of the State, a considerable variety of oaks and hickories, the black walnut, once so common throughout our State, the pine in a limited area, and in some sections many species of *Crataegus* certain species of plum and other shrubby plants. This forest type in southern Missouri is much richer in species than the forests situated back from the streams in the northern portion of the States. In the south, the upland forest type may be divided into several regions, governed by soil and exposure, each of which regions has its characteristic dominant forest trees.

Upland forest type.

From this it may be said in general, that the white oak is found on the ridges in the southeast, thence throughout a large portion of the pine area sub-



A TYPICAL HARDWOOD FOREST IN SOUTHERN MISSOURI.

THE YELLOW PINE (*PINUS ECHINATA*) IN SOUTHEASTERN MISSOURI.

sequently referred to, and finally it serves also to give the stamp of an oak forest to nearly all wooded uplands throughout the middle and northern portion of the State.

Pine and oak.

The pine (*Pinus echinata*) at one time covered, or at least dominated the region south and southwest of the Archaean outcrops in the southeastern part of the State. It found favorable conditions for growth upon the silicious outcrops and flinty hills of the region, growing as far down the northern hillsides as the silicious soil obtained. In some sections this pine has rapidly disappeared, with the common methods of lumbering, and in the absence of all methods of foresting. In some places it has been superseded by orchards of peaches and plums; but with proper methods of forestry it could yet be made to do a most important forest duty.

Occupying a considerable belt west of the region of pine and white oak, there is found the Black-Jack scrub-oak associations. As an economic forest area this is a belt of less importance, and it may be looked upon as marking the border land of forest and prairie.

The upland and south hillside clearings, which require much time in order to be converted into pasture or culturable land, represent a fierce struggle for occupation between many naturalized and native weeds on the one hand and the second growth, or shoot-growth, of the forest trees on the other.

Grasses and farms.

Throughout much of the year the herbaceous growth, or forest vegetation, in this region, is characterized by grasses and a few ferns, with a liberal number of rosaceous plants. This type of forest also shields, particularly on the hillsides, many of our most common and much sought spring plants, as well as the "flowers" of later seasons. Among the very earliest of the former one must mention, without attempting to group them in their exact associations, the dog-tooth violet (*Erythronium*), the spring beauty (*Claytonia*), bloodroot (*Sanguinaria*), violets (*Viola*), and in rich woods, *Isopyrum* in abundance, and many others. These are followed by such of the open woods plants as phlox, verbena, and *Quamasia*, and several species of *Astragalus*.

The early summer flora of herbaceous plants in upland and fairly moist woods, is dominated by such plants as *Phacelia*, *Podophyllum*, *Galium*, and *Geranium*. The species of middle and late summer, in the upland woods, at least, show a proportionately greater number of leguminous and rosaceous

plants, as well as many mints (*Labiatae*) and composites (*Compositae*). The herbaceous autumn flora of the wooded uplands coalesces more than any other with the campestrial and open glade covering. Flowers of the woodland.

As in many other parts of the country, the flowers of the woodland borders are at this season largely composites, such as asters, goldenrods, coneflowers, and the like. In the number of individuals the composite families stand easily first in almost any region, although the subdominant growth in the pine lands consists largely of beard grasses (sometimes termed broomsedges) and hardy legumes.

In spite of the fact, however, that the upland forest type includes the great forest regions of Missouri, yet the river valleys and alluvial plains, when in forest, afford a heavy growth of timber, and owing to the numerous associations of herbaceous plants which are to be found throughout the lowland forests, the latter give every indication of much greater density of shade and luxuriance of growth. The lowland forests include our elms, certain maples, the basswood, and many oaks from the upland associations. It also merges gradually into the true riparian formation, including the poplars, sycamores, willows, and others. In the southeastern portion of the State the black-gum abounds, three species of hackberry are common, and the sweetgum is not infrequent. The above, indeed, gives but a faint idea of the lowland forest type, for numerous shrubs and vines, as well as trees less frequently found, are generally distributed, although they may not be pointed to as constituting usually a dominant element in the general type. The herbaceous growth or forest floor vegetation characteristic of this type, includes also numerous plants of our vernal aestival and serotinal floras. While the general forest floor growth characteristic of this type includes numerous rosaceous plants, some members of the nettle family, as well as some ferns and sedges, we find very commonly many interesting herbaceous associations, with such herbs as members of the waterleaf family (*Hydrophyllaceae*), the



THE EDIBLE MOREL (*MORCHELLA ESCULENTA*)  
ABUNDANT IN SHADY PLACES EARLY IN MAY.

Heavy growth  
of timber.



A WOOD-DESTROYING FUNGUS  
(*LENTINUS QUERCINUS*).

jewel weed (*Impatiens*), certain crucifers (*Cruciferae*), and many others, including violets and mints, bed-straws and composites.

Very little need be said of the plant associations forming the prairie and campestrial type; but under this should be included the vegetation of the prairies, of pastures, and of abandoned fields. In the true prairies the grass floor is of course the most distinctive feature; and composing the latter the grasses are quite various, depending upon the soil and other conditions. Along with these are to be found many species of composites and some mints. Many of our hillsides, which were formerly wooded, have been denuded of practically all trees and the cultivation of fields has broken up the native grass flora. Under such conditions blue grass has usually established itself and has spread, often through its

Prairie and  
campestrial  
types.





THE RELATION OF PASTURAGE TO FOREST VEGETATION AND UNDERBRUSH. THE WORK OF A WEEK BY A FLOCK OF GOATS.

own initiative, to a most remarkable extent. Growing with this there are to be found several weeds of general distribution, notably, the ironweeds and the milkweeds. Along the edges of fields and wherever the cultivator is negligent, there are to be found some native, numerous cosmopolitan introduced species and many fugitive weeds. These last seem to gain strength by the presence of man, and they are so important as a factor in the plant life and in denoting the worth of the soil that one should look with suspicion upon any cultivated field which would not soon grow up to them if neglected. In some sections of the State the prairie vegetation has been so nearly annihilated that in order to find any true associations belonging to it one must look to the borders of railroads, fence-corners, and roadsides.

Fortunately for the industrial development of the State, but detracting somewhat from the botanist's pleasure, perhaps, is the fact that very few instances of a true xerophytic formation are to be found. Nevertheless one finds occasionally breaking the monotony of the general mesophytic formations, exposed clay hills and barren outcrops which are characterized by such modifications in the plant covering as to justify a differentiation of these plants as of xerophytic tendency. It is sometimes difficult to clearly distinguish this xerophytic formation from that which would be properly classified as the extremest in the cliff summit subdivision of the rupestrine flora. The chief woody growth consists of scrub oaks and some dwarf species of crataegus, with a few suffrutescent plants of several families; such herbaceous plants abound as certain members of the rockrose family, a few grasses, and the plantain-leaved everlasting (*Antennaria*); and finally there are found a few dense tufts of several species of moss, including also the common lichen, popularly known as the reindeer moss.

Few instances  
of a live xero-  
phytic formation.

Perhaps the most interesting formation of the State is the rupestrine, which name is applied to the whole vegetation to be found upon rocks and cliffs.

This formation is made up of types of vegetation varying from those which are to be found in situations under ledges, subject to the constant drip of seepage

Rupestrine, a most interesting vegetation.



THE VEGETATION OF CLIFFS AND OF MOIST WOODS.

waters, to that type which is characteristic of the high exposed rocky summits. In the former situations there is found the true fontinal type of mosses and hepatics, and it is this last which at times closely resembles and grades into the xerophytic formation previously described. Besides the fontinal and the exposed types, portions of the cliff may, of course, be covered with vegetable mould or turf, and here a variety of plants of the general mesophytic type (which may require special conditions of shelter) find refuge and flourish. On these cliffs, moreover, are to be found several species of our most interesting ferns, and with the increasing exposure the vegetation is at times completely monopolized by associations of lichens and mosses. Poison ivy and Virginia creeper also find here an opportunity to grow and spread themselves uninterruptedly over considerable areas. On those cliff summits of

Rivers and waters.

Ivy and creepers.

considerable extent, especially on those where occur also shrubby plants of the barren hill types, one notes a peculiar and interesting fact. Some of the plants whose normal habitats are the prairies or the plains have here sought refuge, and upon these exposures they seem to find those conditions well adapted to their maintenance. In fact, throughout the central portions of Missouri, particularly in the vicinity of the Missouri river one searches in such situations alone for many characteristic plants of the more arid west. In the same situations one finds the one member of the heath family whose range is far westward and northward in this State, namely the low huckleberry (*Vaccinium vacillans*).

It is the composite family which in Missouri dominates all others in number



AN "INK CAP" (*CAPRINUS PICACEUS*), A FUNGUS OF EARLY SPRING.

Missouri dominates in the composite family.

No red cedar in Missouri.

Beautiful wild flowers.



THE ALMOND-FLAVORED MUSHROOM  
(*AGARICUS PARACEUS*.)

Algae, and less conspicuous flora.

Fungous collections.

of species, and perhaps in individuals as well. The most striking differences obtain when one compares the orchid and heath-rhododendron elements in our flora with the same elements in eastern floras. In central and southern Missouri orchids are almost totally lacking, and in the same region there is found, for the most part, but a single representative of the heath family. In the southeastern portion of the State these plant species become somewhat more abundant—the impress of the far southern flora being more strongly felt.

What has been said of the Ericaceae and Orchidaceae holds true, in large part for those two geologically old subdivisions of our flora, the Gymnosperms (with us conifers only) and the Pteridophytes (fern and fern allies). North, west and northwest of the pine lands of the State (where only one species of the pine is native) our only coniferous plant is the red cedar which, if it is the same species as the red cedar of the east, is much altered in form and reduced in stature. In central, northern and western Missouri a score of ferns are to be found, which number is nearly doubled by the species of the northeast.

The traveler, the layman traveler, from the east will ask in vain for some of the delicate vernal representatives of his home flora, yet for these he can find in our flora many substitutes. With these substitutes and with many species common to both sections, with the spring beauty, the flowering sumac and the red-bud, followed by the luxuriance of phlox and verbena, he

should be able to compensate himself abundantly for the trailing arbutus, rhododendron and orchids until the time of full fruitage of mints and composites. If he is keen in economic appreciation, as well as in aestheticism, he will certainly realize that the prairies which produce such mats of grasses and such "weed" associations, or the stream flats which support a growth of horseweed and other herbs of almost shrubby proportions, are capable of blossoming in a variety of important ways.

Aside from the cryptogams, or seedless plants, already referred to under the name Pteridophytes, various representatives of the Bryophytes (mosses and hepatics) and of the Thallophytes (algae and fungi) are to be found abundantly, but these, of course, form a much less conspicuous part of the general landscape. The moss flora is varied and interesting. Algae are very common in ponds and on damp soils, but they are not so abundant in our streams as in many other parts of the country. The lower orders are most abundant, notably members of the blue-green algal families, and the lowest families of the green algae.

The fungous flora of Missouri is very interesting. In the vicinity of Columbia, during a single year, certain collections have yielded more than five hundred species. This number may be taken to represent about one-half, perhaps, of the fungi which may be readily found in the vicinity. It seems probable that approximately the usual proportion of saprophytic and parasitic forms will be found to obtain. Many of the commoner parasitic species of the East are not so well represented in our flora. This is particularly true of those species which



A COMMON MUSHROOM OF LAWNS AND MEADOWS (*AMANITOPSIS VAGINATA*).

require for their best development and spread a constantly moist atmosphere and a temperature with extremes not so great as that of this latitude in the West. On the other hand, the saprophytic forms are found in great abundance, and



THE OYSTER PLEUROTUS (*PLEUROTUS OSTREATUS*), AN EDIBLE FUNGUS PRODUCED IN GREAT QUANTITY ON DECAYING LOGS IN MOIST SITUATIONS.

most of the commoner species of the East are undoubtedly also native or introduced into our State. Many edible species grow luxuriantly. One finds in lawns and pastures during the early summer the esculent species of *Coprinus* (ink caps), and later in the season, *Lepiota naucinoides*, *Amanitopsis vaginata* (the meadow *Amanitopsis*), *Agaricus campestris* (the cultivated agaric), *Calvatia cyathiforme* (the cup-shaped puff-ball), *C. craniformis* (the puff-ball of pastures, as well as woodland borders), *Calvatia gigantea* (the giant puff-ball), and many others. In the wooded areas there are to be found in the early summer, *Morchella esculenta* (the edible morel) in great quantity, and this is a plant too little appreciated by the layman. In addition, the giant *Gyromitra* (*Gyromitra esculenta*), several species of *Lactarius*, etc., are not uncommon. Decaying elm and willow logs of the low woods furnish a profuse growth of the oyster *Pleurotus* (*Pleurotus ostreatus*). During the late summer and early autumn several

Many edible mushrooms.



THE LEATHERY FUNGUS *STEREUM FASCIATUM*, A FACTOR IN THE DESTRUCTION OF FALLEN OAKS.

large species of *Clitocybe* are found on roots of decaying stumps in lawns almost everywhere, together with some smaller species of related genera. In the early autumn the most abundant edible fungus is *Armillaria mellea* (the honey colored *Armillaria*). The latter fungus occurs in such abundance in the moist forest, and in locations where pasture succeeds forest, that is, where decaying roots crop up through the sod, that it is often possible to collect it by the wagon load. Of the poisonous or suspicious mushrooms, only a few have as yet been found in the vicinity of Columbia. A variety of the fly *Amanita* (*Amanita muscaria*) is known to be poisonous, and among those looked upon with suspicion may be mentioned one or two other species of *Amanita* and certain members of the genus *Russula*, and the suspicious *Clitocybe* (*C. illudens*).

But few poisonous varieties.

Number of species of plants in the State.

Concerning the number of plants (reckoned by species) in the State, no definite accurate statements can be made. Professor Tracy, twenty years ago, published a list of eighteen hundred, with many regions not covered. Lists of Jackson county and Boone county flora add at least seven hundred to the list, so it can be safely assumed that the flora of Missouri includes more than twenty-five hundred species of these higher plants. Its interest to the botanist and its economic value are suggested by this general discussion of the character and extent of the flora of Missouri.



**M**ISSOURI is rightly regarded as an agricultural State. Yet in Missouri are three cities of over 100,000 inhabitants, a larger number than in any other State except five. St. Louis, the metropolis of Missouri, is the only city in the United States which by special constitutional enactment is a city without a county organization. Of the total population of Missouri 34.9 per cent reside in towns and cities. There are forty municipalities in the State with a population of over 3,000. There are 107 towns with a population between 1,000 and 3,000. Missouri cities, towns and villages are organized under the general State law as of the first, second, third or fourth class or, in some instances, under special charters granted

**CITIES OF 3,000 AND OVER, WITH RANK IN THE UNITED STATES AND IN THE STATE, TOGETHER WITH THE POPULATION IN 1890 AND 1900.**

	RANK IN U. S.	RANK IN STATE	POP. 1890	POP. 1900		RANK IN U. S.	RANK IN STATE	POP. 1890	POP. 1900
Aurora	712	16	3,482	6,191	Louisiana	858	22	5,071	5,131
Boonville	987	31	4,132	4,377	Macon	1,072	34	3,350	4,068
Brookfield	802	20	4,534	5,484	Marshall	865	24	4,258	5,086
Butler	1,352	38	2,812	3,158	Maryville	958	29	4,017	4,577
Cape Girardeau	909	27	4,288	4,815	Mexico	863	23	4,789	5,090
Carrollton	1,122	36	3,858	3,854	Moberly	543	11	8,213	8,012
Cartersville	981	30	2,884	4,445	Monett	1,367	39	1,699	3,115
Carthage	470	9	7,962	9,416	Nevada	590	13	7,262	7,461
Chillicothe	635	15	5,699	6,905	Poplar Bluff	1,003	32	2,187	4,321
Clinton	871	25	4,689	5,061	Rich Hill	1,074	35	4,008	4,053
Columbia	777	18	3,985	5,651	Richmond	1,234	37	2,895	3,478
DeSoto	784	19	3,960	5,611	St Charles	545	12	6,161	7,982
Fulton	897	26	4,289	4,883	St Joseph	34	3	52,811	102,979
Hannibal	344	7	12,816	12,780	St Louis	4	1	460,357	575,238
Independence	631	14	6,373	6,974	Sedalia	281	6	13,994	15,231
Jefferson City	450	8	6,732	9,664	Springfield	181	5	21,842	23,267
Joplin	155	4	9,909	26,023	Trenton	817	21	5,039	5,396
Kansas City	22	2	132,416	163,752	Warrensburg	920	28	4,682	4,724
Kirksville	737	17	3,491	5,966	Washington	1,407	40	2,725	3,015
Lexington	1,041	33	4,538	4,190	Webb City	483	10	5,043	9,201

by the legislature. The cities are, in the main, well improved, with good streets and light, water, and sewerage systems. The larger cities are described in separate chapters while those of smaller population are described under the counties in which they are located.

THE FOLLOWING GIVES A LIST OF THE CITIES WITH POPULATION BETWEEN 1,000 AND 3,000 AND THE RANK OF EACH IN THE STATE.

RANK IN STATE	POP. 1900	RANK IN STATE	POP. 1900	RANK IN STATE	POP. 1900	RANK IN STATE	POP. 1900
Albany	66 2,025	Ferguson	145 1,015	Lee's Summit	106 1,453	Princeton	96 1,575
Appleton	129 1,133	Festus	116 1,256	Liberty	51 2,407	Rockport	133 1,080
Ash Grove	141 1,039	Fredericktown	95 1,577	Malden	105 1,462	Rolla	94 1,600
Belton	147 1,005	Gallatin	84 1,780	Marceline	49 2,630	Salem	103 1,481
Bethany	62 2,093	Glasgow	91 1,672	Marionville	114 1,290	Salisbury	78 1,847
Bevier	81 1,808	Granby	54 2,315	Memphis	56 2,195	Sarcoxi	131 1,126
Bloomfield	104 1,475	Grant City	108 1,406	Milan	86 1,757	Savannah	73 1,886
Bolivar	76 1,869	Greenfield	109 1,406	Monroe City	68 1,929	Seneca	140 1,043
Bowling Green	69 1,902	Greenville	139 1,051	Montgomery City	65 2,026	Shelbina	87 1,733
Breckenridge	146 1,012	Hamilton	83 1,804	Mound City	90 1,681	Sikeston	136 1,077
Brunswick	110 1,403	Harrisonville	79 1,844	Mountain Grove	148 1,004	Slater	50 2,504
California	57 2,181	Hermann	97 1,575	Mount Vernon	119 1,206	Stanberry	48 2,652
Cameron	41 2,979	Higbee	128 1,151	Neosho	46 2,725	Ste. Genevieve	89 1,707
Canton	52 2,365	Higginsville	44 2,791	New Franklin	126 1,156	Sweet Springs	134 1,080
Carl Junction	123 1,177	Holden	60 2,126	New Madrid	102 1,489	Tarkio	70 1,901
Caruthersville	55 2,315	Huntsville	82 1,805	Norborne	121 1,189	Thayer	115 1,276
Centralia	88 1,722	Humansville	138 1,055	Odessa	107 1,445	Tipton	113 1,337
Charleston	72 1,893	Jackson	92 1,658	Oregon	143 1,032	Troy	127 1,153
Clarence	122 1,184	Kahoka	80 1,818	Oronogo	63 2,073	Unionville	64 2,050
Deepwater	120 1,201	Kennett	98 1,509	Osceola	142 1,037	Vandalia	124 1,168
Dexter	77 1,862	Keytesville	130 1,127	Pacific	118 1,213	Versailles	117 1,240
Doniphan	99 1,508	Kirkwood	43 2,825	Palmyra	53 2,323	Webster Groves	71 1,895
Edina	93 1,605	La Grange	100 1,507	Paris	111 1,397	Wellsville	125 1,160
Eldorado Spgs.	59 2,137	Lamar	45 2,737	Pattonsburg	137 1,065	Weston	144 1,019
Excelsior Spgs.	74 1,881	La Plata	112 1,345	Pierce City	58 2,151	West Plains	42 2,902
Farmington	85 1,778	Lathrop	132 1,118	Plattsburg	75 1,878	Willow Springs	135 1,078
Fayette	47 2,717	Lebanon	61 2,125	Pleasant Hill	67 2,002	Windsor	101 1,502





**T**O MINDS not given to an indolent acceptance of the merely superficial aspect of recorded facts, the history of St. Louis, culminating in the World's Fair period, resolves itself consistently into seven great illuminative epochs. Each of these is significant and typical of the city's distinctive life and especial destiny, yet, singly, each has many points in common with certain phases of the history of other American cities. As a historical whole, however, in which character alone may they be contemplated as furnishing a genuinely enlightening story of St. Louis, they are without a parallel in American annals. These seven great epochs in the history of St. Louis may be set down as follows:

The foundation, settlement, and occupation of St. Louis by the French colonists under Laclede and Chouteau, extending from 1764 to 1803.

The Americanizing of St. Louis, dating from the Louisiana Purchase in 1803, and accomplished by the influx of Virginia, Tennessee, Carolina, and New England blood, and later by an additional incoming from Kentucky. This was the work of the generation from 1803 to 1836.

The development of the growing town of St. Louis into one of the most important Mississippi valley commercial points of that day. This was due to the amazing growth of steamboat traffic on the Mississippi river and its tributaries, which first secured and then maintained St. Louis' control of the trade of the Mississippi valley, a period extending from 1836 to 1860.

The Civil War period in St. Louis, a time of feverish commercial conditions and bitter political animosities. During this period St. Louis took its place in history as the American city that kept its State in the Union against the will of a majority of the State's people. This epoch extends from 1861 to 1865.

The reaction period following the close of the Civil War, the only era of apparent stagnation or retrogression in the history of St. Louis. This lasted from 1865 to 1878.

The renewal of St. Louis' progress along the lines of its true destiny, a period sometimes mistakenly alluded to as "the birth of the new St. Louis." Within this period the city made notable gains in trade and industry, in population and area, and took its rightful place among the great cities of the Union. 1878 to 1898.

The World's Fair Period in St. Louis. This epoch constitutes the crowning glory of the city's history to date and has a tremendous significance as bearing

*Photo in heading: Laclede, Founder of St. Louis; Union Station.*





LANDING OF LACLEDE ON THE SITE OF ST. LOUIS.

upon its future. The commanding position occupied by St. Louis, the entire adequateness of its preparation for the Fair, the vast extent of its municipal improvements, the consequent prestige gained in the world's eye, render this period singularly vital with meaning of St. Louis' future greatness as based upon results already attained. 1898 to 1904.

With these seven logical divisions of the history of St. Louis kept in mind, the story of the city's 140 years of existence assumes a coherent completeness as convincing in its teaching of destiny as a Greek drama. The city was preordained to good fortune from the very day when Pierre Liguette Laclède founded it as a trading post and predicted the greatness which it was to attain. There has been no permanent or inherent obstruction to the fulfillment of this prophetic utterance.



The little band of Frenchmen who, under Laclède and Chouteau, built the primitive cabins that constituted the material St. Louis of 1764, were adventurous and enterprising souls. They represented, indeed, the staunchest blood that France has ever sent out for colonizing achievement. The genuine pioneer spirit animated them, a spirit vital with the instinct for exploration, steadfast to overcome difficulties and endure hardships, keen to benefit from the results of their labors and sufferings in a new country. They were not only venturesome pathfinders in this virgin land, but shrewd traders as well, driving close bargains and possessed of a distinct and superior talent for commerce. Thrifty and industrious, these Frenchmen and their families laid a sound foundation for the St. Louis of to-day.

This foundation finds its bed-rock substance in the fur trade then so profitably followed along the western frontiers of the white man's progress across the continent. The early fur trade of the American west offered powerful inducements to enterprising souls. The skins taken from the wild animals of prairie, mountain and river valley were more easily convertible into money than was any other commodity. They were almost the sole article of export, the tobacco of the older settlements alone, perhaps, equaling them in commercial importance from this point of view. They furnished the material for the clothing worn by

## SOME BUILDINGS OF ST. LOUIS UNIVERSITY.

SCIENCE HALL.

SCHOOL OF  
DIVINITY.MARION-SIMS  
BEAUMONT COLLEGE.FRANCIS  
XAVIER  
CHURCH.

SCHOOL OF PHILOSOPHY.

a large proportion of the population, so that there was a strong domestic demand. They could be purchased of the Indian hunters of sure a great profit, or individual skill and and rifle. To men with with executive and returns from this exceptionally sure. the western fur trade the commercial basis Louis of the latter

century stood and prospered. Under the healthful stimulus of this trade, the little settlement of French folk—French always, and leaving the impress of their nationality upon St. Louis in stubborn disregard of the one-time fact of Spanish sovereignty over the entire territory—grew steadily in numbers and consequence. French hunters and trappers pushed farther and farther into the west and northwest, returning to St. Louis once each year with the furs of their own securing, or those obtained from the Indians in barter. French boatmen voyaged the Mississippi river with shipments of furs consigned by the Chouteaus and other great traders to New Orleans. Within the settlement itself there was a steady improvement of conditions. Bigger warehouses were built, stores became more numerous, more pretentious residences took the place of the rude cabins of earlier days, the life of the little community widened and assumed an attractiveness impossible to the virgin colony that had followed Laclede and

the west at figures in plentifully gained by proficiency with trap money at command and organizing genius, the trade were large and Therefore it was that of those days furnished upon which the St. half of the eighteenth



DOWN TOWN IN ST. LOUIS, OLIVE STREET AT BROADWAY.

Chouteau to the founding of St. Louis. This growth of the town as a French settlement was so continuous and healthful as to contain proof, even at that early stage of St. Louis' history, of the natural advantages operating for the future greatness of the city.

But there was to be little more than a generation of what may be called the distinctively French shaping of St. Louis' destiny. With the purchase of the Louisiana Territory from France by the United States in 1803, began the Americanization of St. Louis. It is true that the influence of the original French settlers was potent for some years thereafter, but it is equally true that by sure degrees the Anglo-Saxon element grew stronger and stronger until finally it became the dominant force, and St. Louis was French in name only.

Exactly as France had contributed her sturdiest pioneer blood to the founding of St. Louis, so did this encroaching element represent the best Anglo-Saxon

stock that the world has ever seen. From Virginia, from Tennessee, and from the two Carolinas came the Americans who succeeded the French as the dominant factors in shaping local history. A little later they were followed by stanch men and women from New England, and the combination militated to produce a singularly masterful force. In almost every instance the new

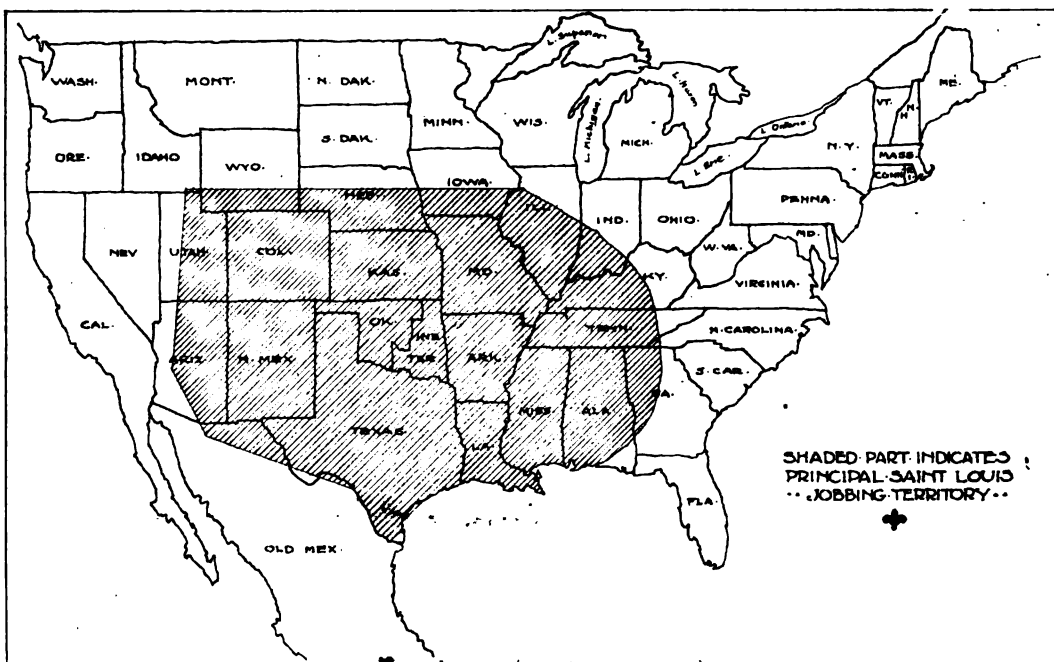


ST. JOHN'S METHODIST EPISCOPAL CHURCH SOUTH, ST. LOUIS.



EXCURSION BOAT ON THE MISSISSIPPI RIVER.

citizens of St. Louis stood for the best of the older communities whence they came. In many instances they were people of exceptional education and gentle breeding. They had shared to the full the advantages of that republican freedom which their immediate ancestors had won from England as the result of the American revolution. They were vital with the splendid stimulus of popular liberty and democratic institutions and form of government. As had been their French predecessors, they were alert in commerce, and they possessed superior constructive and administrative talent. When the era of the Americanization of St. Louis dawned in 1803, the town had a population of something less than 1,000 souls. When it reached its noonday of completed achievement in 1835, allowing one generation of time for this achievement, St. Louis had a population of over 8,000, and five years later this was doubled. The first public school had been established, the first waterworks put in operation, the first banking institution incorporated; and St. Louis itself became a corporate city during this period. During the greater part of the distinctively French era the city limits never extended beyond Biddle street on the north, Seventh street on the west, and Cerre street on the south, the Mississippi river, of course, being the eastern boundary. In 1822, when American influence was making itself felt, the city limits were extended to Ashley street on the north and to Convent and Labbadie streets on the south. In 1839 and in 1841 the limits were again extended, the latter increase of territory giving the little city a total area of 2,630 acres. It was during the transition period, when St. Louis was slowly changing from French to American, that the early French names of the streets were abandoned and English substituted. By 1835, at the latest, the change was superficially complete, though the French still remained important factors in the city's development. But the subordination of French to American influence had been in marked evidence since the city's incorporation and the election, in 1822, of William Carr Lane, as the first mayor of St. Louis. The early French settlers and their sons had performed their part in fulfilling the city's destiny. It had been a most worthy and beneficent performance of pioneer duty. It had been followed by a singularly aggressive and forceful American administration, thus making the history of St. Louis during its first half-century or more a fine illustration of the best results possible to the best endeavor of two of the most vigorous breeds of men the world has ever known.



When the steamboat "Pike," commanded by Captain Jacob Reed, made a landing at the foot of Market street on August 2, 1815, being the first steamboat to reach St. Louis, a prophetic vision would have caused the people of the city to indulge in general rejoicing and especial thanksgiving. For in reality the "Pike" was the herald of a traffic that secured and long maintained for St. Louis that control of the trade of the Mississippi valley which first placed the city in the front rank of American municipalities. It is true that the development of steamboating was not at first notable, it being four year's after the "Pike's" arrival that the first steamboat to ascend the Missouri, the "Independence," left her St. Louis landing, but it was a steady growth and, finally, the steamboat traffic to and from St. Louis assumed vast proportions. Its golden age may, perhaps, be stated as extending from 1845 to 1875, a period of thirty years, during which time it accomplished marvelous things for St. Louis. The commerce of the city flourished and its trade territory widened to an amazing extent. The river front was one of the famous American scenes of the times, the St. Louis levee being lined with steamboats, three or four deep, receiving and discharging cargoes. The commission houses doing a southern supply business became great and wealthy. The up-river trade was also tremendously profitable and enriched many St. Louis concerns. The influence of St. Louis as a great supply and distributing point, as well as the chief market for the sale of Mississippi valley products, was then fully recognized and her prestige permanently established. During this period the Merchants' Exchange of St. Louis was organized, in 1836, and came to be recognized as one of the most important American commercial bodies. But it was while the river traffic was at its height, and with twenty-five prosperous years still ahead of it, that ground was broken for the Pacific railroad, the first railway system extending west of St. Louis. From that year, 1851, until the present time, the development of St. Louis as a railway center was so steady, consistent and healthy that the city now stands among the first in the Union in the extent of its shipping and passenger traffic facilities. The river trade took a secondary place about 1875, but there is little doubt that its revival will constitute one of the inevitable developments of the not remote future. It exerted a powerful influence over the upbuilding of St. Louis, and

the great figures of its history should be held in appreciative remembrance by the city which they served with signal distinction. In 1860, when the Civil War became imminent, the steamboat traffic of St. Louis probably had attained its fullest volume, and the city's population had reached a total of 160,773. At the very close of the steamboat era, the Eads Bridge across the river was finished and opened for traffic, and the original St. Louis union depot was established. These two events graphically indicated the truth that the railway had supplanted the steamboat for the further development of St. Louis as the greatest inland commercial city of the United States.

The Civil War benefited St. Louis trade in a sense, but those business houses employed in supplying the south with needed products suffered severely. The trade stimulus of the war period came from government contracts for army supplies, and was of a feverish character, experiencing a reaction after the Civil War closed, which caused a marked depression until the city once more renewed its legitimate trade connections and again moved forward in the paths of its logical destiny. Then, too, the naturally disturbed state of the popular mind had its inevitable effect in checking trade progress. The situation in St. Louis at the outbreak of the Civil War was remarkable. The city boasted a

blended population, potent for commercial and civic development, but differing radically on the issues of the Civil War. In the course of years, Kentucky had joined Virginia, Tennessee and the Carolinas in contributing to the influx of

strong blood for the city's upbuilding. There had been a heavy accession of Germans, due to national discontent culminating in the revolution of 1848 in Germany, and resulting in the emigration of Germans by thousands. These people were thrifty, home-making people, commercially acute to a marked degree, and of admirable citizenship material. The increase of Irish citizens was also notable, constituting an element that has lent its best effort to the service of St. Louis. The New England contingent had been materially strengthened, an enterprising, resolute and valuable component part of the local population.

Widely speaking, the alignment of the several elements on Civil War issues placed the Southerners, the French and the Irish in the cat-



DAVID B. FRANCIS, PRESIDENT LOUISIANA PURCHASE EXPOSITION.

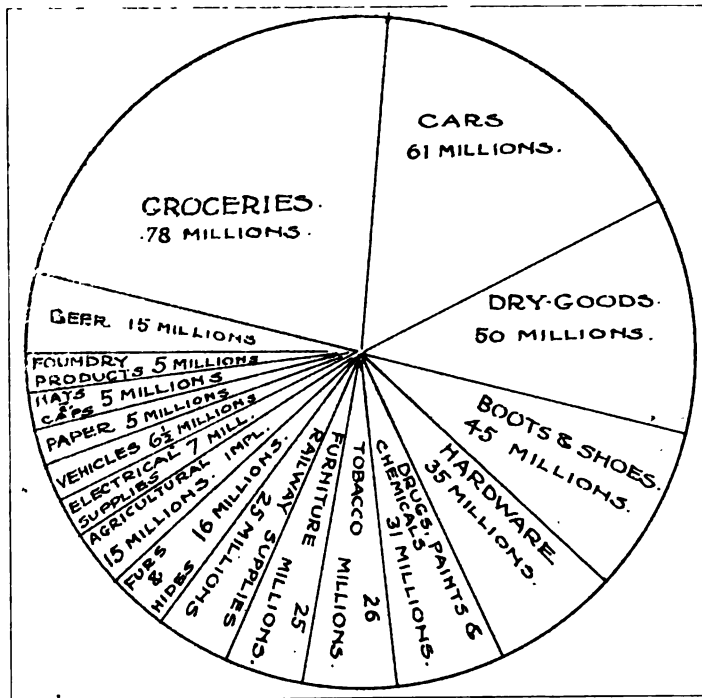


WALTER B. STEVENS, SECRETARY,  
LOUISIANA PURCHASE EXPOSITION.



WM. H. THOMPSON, TREASURER,  
LOUISIANA PURCHASE EXPOSITION.

## THE STATE OF MISSOURI.



THE WHOLESALE BUSINESS OF ST. LOUIS—SALES FOR 1903.

egory of Confederate sympathizers, with the New Englanders and the Germans as Unionists in opposition to them. Missouri itself was southern in sentiment, but the federal government was so quick to recognize the crucial importance of the situation in St. Louis, and so prompt to support the New England and German local effort against the movement to carry Missouri out of the Union, that it was successful in holding this great border State in line, although the Missouri contribution to the Confederacy was notable in extent and quality. The best blood of the State so divided, however, was enlisted under both flags, brother against brother, and it took years to allay the resultant bitterness of spirit. During the Civil War period, St. Louis was a very hotbed of political intrigue, with Unionists and Confederate sympathizers in daily antagonism at close range, and its intimate history is peculiarly colorful and romantic in consequence. St. Louis lives in the larger annals of the time as the American city which held its State in the Union against the will of the majority of the people in that State.

The same feverish commercial activity that had prevailed in St. Louis under the stimulus of war contracts, marked the first few years following the close of the war. It was followed, however, by the inevitable reaction, and this period of reaction is notable as constituting the only era of non-progression known in the history of St. Louis. It was as if the city, torn and bleeding from war's rude grasp, had sunk breathless into a temporary stupor, too wearied to resume the normal activities necessary to its advancement in the avocations of peace.

But this was only temporary, as stated, and in 1878 St. Louis once more began to assert its influence as the leading interior city of the Union. This revival of energy and commercial enterprise has been mistakenly described as "the birth of the New St. Louis." Such a characterization is a grievous error. The "New St. Louis" had but one birthday, and that was in 1764, when Auguste Chouteau, with thirty Frenchmen at his back, landed at the foot of what is now Walnut street and, acting under Laclede's orders, founded the new settlement which Laclede christened St. Louis. At that time Laclede himself foresaw and predicted the greatness of St. Louis and the city moved straight onward to its des-

tiny. Its progress was checked by the Civil War, but when, in 1878, its masterful business men once more regained their aggressive and compelling spirit, the city again moved forward along its appointed course. It was the Old St. Louis reasserting itself and advancing to its preordained greatness. At this time the population of the city was close to \$350,000.



BUILDING THE ST. LOUIS, COLORADO AND KANSAS CITY  
RAILROAD.

But this resumption of St. Louis' progress in the path of destiny was equivalent to a new birth. It began about 1878. In 1876 the scheme and charter were adopted, making St. Louis an independent city without either county government or taxation. In 1878 the first Velled Prophet's pageant was held, to be repeated annually thereafter, drawing vast crowds to St. Louis. In 1881 the Mercantile and Commercial clubs were organized, each intended to further the city's

business interests. In 1882 the Cotton Exchange building was opened, the Exposition building was begun, the first extensive street illuminations, as a feature of the fall festivities, were seen, and the successful movement for the paving of the down-town streets with granite was begun. In 1884 the first Exposition was held, being the beginning of the most successful permanent exposition known in American history. In this year also the local movement for rapid transit street railway facilities was inaugurated, culminating ultimately in securing for St. Louis what is confessedly the most perfect, complete and comprehensive electric street railway service in this country. Indeed, the record of the period from 1878 to the present time in St. Louis is a marvelous record of the modernizing of a city. It is a record made by young men, the indomitable generation that has come to the front since the Civil War period. They were the inheritors of splendid opportunities and they have rendered a splendid accounting of their inheritance. Mention has just been made of some of their achievements, bringing the record up to 1884. Here are other notable instances of the progress accomplished:

In 1885, with the breaking of ground for the first great fire-proof office building in St. Louis, began the "sky-scraper" era of architectural construction which has transformed the physical appearance



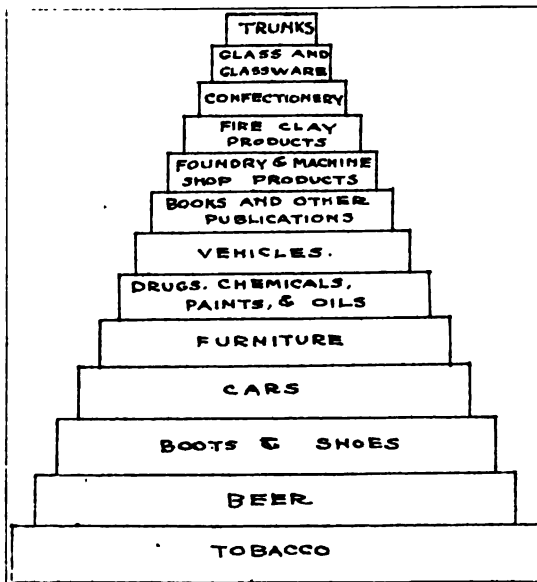
MISSOURI PACIFIC DEPOT, JEFFERSON BARRACKS.



of the business section of St. Louis. Lofty buildings succeeded one another with an almost bewildering rapidity. Local capital, reinforced by outside investments attracted equally to the industrial and commercial fields in St. Louis, found that these fire-proof "sky-scraper" office buildings made most profitable returns on an exceptionally safe employment of money. They were filled with occupants as soon as completed, and there was still a demand for more. Coincidentally, there was a marked increase in the number of large industrial plants established in St. Louis. There was also a vast increase in the capitalization and influence of local banks, and the organization of trust companies was an accompanying feature of the time. In addition, and as a singularly

helpful force, the development of St. Louis as a great railway center went forward with giant strides. In 1886 the first cable street railway was put in operation, the Union Depot Company was formed and a memorable period of activity in building associations was begun. In 1887 the city streets were first sprinkled by municipal contract, a charter was obtained for a second bridge, the Merchants, across the Mississippi, and St. Louis was made a central reserve city for the national banks of other cities. In 1888 work was begun on the new waterworks, having a capacity of 100,000,000 gallons daily, and a movement was begun to build freight depots on this side of the river for eastern roads. In 1889 the Merchants bridge across the Mississippi was constructed, the first electric street cars were operated and the largest electric arc-light works in the world were constructed in St. Louis. In 1890 the Merchants bridge was opened for traffic, the foundation-stone of the new city hall was laid, and the city streets and alleys were lighted by electricity. In 1891 the first county electric

THE RELATIVE MANUFACTURING- IMPORTANCE OF THE FOUR GREAT CITIES OF THE UNITED STATES BY THE LAST CENSUS		
1. NEW YORK	MANUFACTURING PRODUCTS	1,317,295,396
2. CHICAGO	MANUFACTURING PRODUCTS	888,945,311
3. PHILADELPHIA	MANUFACTURING PRODUCTS	603,466,526
4. SAINT LOUIS	MANUFACTURING PRODUCTS	233,628,733



COMPARISON OF ST. LOUIS MANUFACTURES.

St. Louis electric road, new buildings with a total frontage of 39 miles were erected, the grand Columbian street illumination took place and the Smoke

road was built, the new Mercantile Club building was commenced, the St. Louis Traffic Commission was organized, work was commenced on the new union station (photograph in chapter heading), and the Autumnal Festivities Association was formed, with more than \$500,000 subscribed to its support in advancing the interests of St. Louis. In 1892 work was begun on the new Planters' Hotel, to cost \$2,000,000.00, Congress was induced to appropriate \$16,000,000 for the improvement of the Mississippi river, the first postal street railroad car to be run in the United States was operated over a



MISSISSIPPI RIVER SCENE AT ST. LOUIS.

Abatement Association was formed. In 1893 the electric street car system was completed, prosecutions under the smoke-abatement ordinance were instituted, St. Louis gained the title of the "solid city" because none of its banks or business houses failed in the panic of this year, St. Louis city four-per-cent renewal bonds were placed in London at par, and the St. Louis union station, the largest in the world, was completed. Thus, approaching now the World's Fair period in St. Louis' history, the city swiftly and steadily progressed, distancing all competitors and, under its destiny, plainly preparing itself adequately to meet the international expectation in 1904. The five years intervening between 1893 and 1898, when the movement for the Louisiana Purchase Centennial Celebration began, were years of marked progress, bringing the city to the most important stage of its history.

But, before entering upon a consideration of the World's Fair period, it will be well to make a brief study of other than the material aspect of the city. The character of a community is more accurately to be estimated by the character of its people than by the mere extent of its commercial and industrial enterprise and the totals of its wealth in dollars and cents. This character is best revealed by the community's development along the higher levels of life.

The religious phase of St. Louis' history is found in a record of steady growth in the number of churches which places St. Louis in the foremost rank of American cities in this essential requirement. There are more than 300 churches in St. Louis, many of them among the most imposing in the United States. The congregations and parishes are large, zealous and potently helpful in general as well as special fields of good work. Catholics and Protestants stand shoulder to shoulder in many movements for the public welfare. Some of the most distinguished divines in this country are members of the local clergy and the average of ability is exceptionally high. Among the more famous churches are the old Catholic Cathedral, on Walnut street, between Second and Third streets; the Episcopal Cathedral (Christ church) on Thirteenth and Locust streets; the Pilgrim Congregational, Washington and Ewing; the First Presbyterian church, on Washington avenue and Sarah street; the Centenary Methodist church, on Sixteenth and Pine; the Second Presbyterian church, Taylor avenue and Westminster Place; the Second Baptist church, on

Locust and Beaumont; the Rock church (St. Alphonsus), on Grand and Finney avenues; The Episcopal church of St. Mark's; the Jewish congregations of the United Hebrew, Temple Israel and Shaare Emeth, and the Church of the Messiah (Unitarian). This is but a brief mention, however, and is not intended to ignore the claims of other local churches to deserved distinction. Of late years the trend of the churches has been to the westward section of the city, but the old northern and southern religious landmarks still stand in active service and the central and down-town sections are provided for by missions and chapels. Among the local charitable organizations the St. Louis Provident Association, the St. Vincent de Paul Society and the Associated Hebrew Charities are the most prominent. St. Louis is exceptionally well supplied with hospitals, both public and private, and the new city hospital, built on the approved modern separate pavilion plan, is now almost completed.

Of the educational institutions of St. Louis it is impossible to treat in such detail as they deserve. The local public school system is confessedly one of the best in the Union, and a non-partisan school board admirably administers its affairs along the most advanced educational lines. The Washington University, one of the leading institutions of learning in this country, is now admirably equipped for its high work. Its new buildings, used by the World's Fair Company as administration headquarters, but now reverting to the University, are

singularly beautiful, commodious and correct in their adaptation to University needs. Among the effective branches of Washington University are the St. Louis Medical School, the St. Louis Law School, the School of Botany, the Manual Training School, the Mary Institute, for girls, the School of Fine Arts and the Washington Observatory. The St. Louis University (Catholic) has been identified with local history for more than seventy years and has done teaching of the highest order. The Christian Brothers College was established in St. Louis over fifty years ago and has been a potent educational factor. The Catholic parochial schools are numerous and excellent and there are many private schools admirably equipped and managed. The leading libraries in St. Louis are the Mer-



ON THE MISSISSIPPI RIVER BELOW ST. LOUIS—RIVER AND RAIL.

cantile, now over fifty years old, the public library, made a free library in 1894, and with a history covering thirty-five years, the St. Louis Law Library, an old and well sustained institution, and the Book-Lovers' Library, but recently estab-

lished. The local libraries are famous for efficiency and completeness and compare favorably with those of eastern cities.

Mr. Carnegie has been so impressed with the public library system of St. Louis that he has given one million dollars to the purpose of bringing the advantages of this library nearer the people. Half of this amount is to be spent in erecting a building on a site covering half a block, which has been obtained by the library through the city, and the other half is to be spent in establishing branch libraries in different parts of the city.

The parks of St. Louis are beautiful, spacious and well-maintained. The largest, Forest Park, contains 1,371 acres, and furnishes a large part of the World's Fair site. Tower Grove Park, comprising 266 acres, is renowned for its beauty and for the magnificent statues adorning it. It adjoins the Missouri Botanical Gardens, the most famous of their kind in this country, which were presented to the city by the late Henry Shaw. Among the remaining city parks are the Lafayette, the O'Fallon and the Carondelet Parks, but there are many smaller public playgrounds of much attractiveness. A great boulevard and driveway system, to cost many millions of dollars, is now under course of construction, and will, when completed, connect all the larger parks in one continuous chain.

The club life of St. Louis is active and widely varied in its scope. The St. Louis Club is the richest and best appointed in the city and has a magnificent home on Lindell boulevard just west of Grand avenue. The University Club appeals to lettered men and exercises a strong social influence. The Mercantile Club and the Noonday Club are more nearly representative of the city's commercial interests, and from them has sprung the Business Men's League, one of the most powerful commercial influence in this country and a pillar of strength for St. Louis. The Harmonie, the Union and the Liederkranz are among the local clubs that have lived and prospered on a basis of deserving.

Of theatres, St. Louis has many, with an excellent record of management. The Olympic, the Century, the Columbia, the Grand Opera House, the Imperial, Havlin's, the Crawford are among the number already well established, and the demands of



ON THE MERAMEC AT PACIFIC—ON MISSOURI  
PACIFIC RAILWAY.

the World's Fair have added materially to the list. This is true also of the hotels of St. Louis, which now compare favorably, in number and quality, with those of any other city in the United States. The musical development of St. Louis has been marked of late years, the Choral-Symphony Society being the leading musical organization. Reverting briefly to the distinctive educational



ON A ST. LOUIS COUNTY POULTRY FARM.

institutions of St. Louis, it may be stated that this city is unsurpassed in the number and high standing of its medical colleges. Almost every known school of medicine is represented, and the work in this educational field is admirably done. The newspapers of St. Louis wield a national influence and are controlled by men of great enterprise and ability. The morning field is covered by the Globe-Democrat and Republic, with the St. Louis World as a newcomer, and the afternoon field by the Post-Dispatch, the Star and the Chronicle. The local German press comprises the Westliche Post, the Mississippi Blaetter and the Amerika. The magazine press is represented by the St. Louis Mirror, the Censor, and the Valley Magazine. The news service of the leading papers of



AT PLANT OF MISSOURI TIE AND TIMBER COMPANY, GRANDIN, IN ST. LOUIS  
TRADE TERRITORY.

St. Louis is abreast of that of any in the world and their editorial utterances are recognized as potential to an unusual degree. In the field of journalistic enterprise they occupy a leading place. On the occasion of its twenty-fifth birthday anniversary the Post-Dispatch recently broke the world's record by issuing a 160-page paper, the largest in the history of journalism. A salient characteristic of the local press is its devotion to St. Louis interests and zealous willingness to serve the city in every helpful way possible. This spirit has been finely manifested in co-operation with World's Fair work, and the newspapers of St. Louis deserve high praise for their service in this field. St. Louis also has many trade papers and publications devoted to special interests.

What is destined to be known in St. Louis history as the World's Fair period began in 1898. In that year the first organized action was taken by the Missouri Historical Society in urging a celebration of the centennial anniversary the purchase of the Louisiana Territory from France by the United States, con-

summed by the transfer of the territory on April 30, 1803. Governor Lon V. Stephens, of Missouri, called a convention of delegates from the twelve States and two territories included in the Louisiana Purchase to assemble in St. Louis on January 10, 1899. This convention was attended by 93 delegates and it was voted to hold the Louisiana Purchase Exposition in St. Louis. It was also decided that the United States Government be invited to assist in this World's Fair celebration of the Louisiana Purchase centennial. The convention appointed an executive committee, with David R. Francis as chairman, and this body appointed a committee of fifty prominent citizens to co-operate in the movement. It was decided that the amount to be raised to defray the cost of the



MISSOURI GROWS  
MORE WHEAT THAN GREAT BRITAIN.

making of the World's Fair should be placed at \$15,000,000, the exact sum paid to France by the United States for the Louisiana Territory. Of this amount, one-third was to be raised by private subscription, one-third by the city of St. Louis and one-third was to come from the Federal Government. The World's Fair Executive Committee was increased to 200. On June 4, 1900, the National Congress passed a bill providing for a national appropriation of \$5,000,000 on condition that the sum of \$10,000,000 was raised in St. Louis. The local popular subscription of \$5,000,000 was completed January 12, 1901. On January 30, 1901, the Municipal Assembly of St. Louis passed an ordinance authorizing the issuing of \$5,000,000 in city bonds for World's Fair use. Whereupon the National House of Representatives, on February 9, 1901, and the United States Senate on March 3, 1901, passed the bill appropriating from the National Treasury, for the

World's Fair, the sum of \$5,000,000, and this bill was signed immediately by the late President McKinley. On March 12, 1901, President McKinley appointed a World's Fair National Commission of nine members. On August 20, 1901, he formally invited all foreign nations to participate in the World's Fair. Congress later appropriated \$1,500,000 for a Government exhibit at the World's Fair, and the State of Missouri appropriated \$1,000,000 for a State exhibit. Many other states came rapidly into line, and it was soon made certain that a total

*120 Acres.*

### *Size of Average Missouri Farm.*

of \$50,000,000 would be expended for the World's Fair commemorating the centennial anniversary of the Louisiana Purchase. This outline-sketch of the World's Fair movement up to a certain point is necessary to a proper consideration of St. Louis history during the World's Fair period.

St. Louis enters upon this period as the fourth city in population in the United States, having a population of 700,000. It covers an area of 62 1-2 square miles. It has 20 miles of river frontage. Over 8,000 factories testify to its importance as an industrial center. It takes rank as the fourth manufacturing city in the world. It has two great bridges, the Eads and the Merchants, spanning the Mississippi river. It is the terminal point of 24 railway lines. It has the largest railway union station in the world. Within 500 miles of St. Louis there is a population of 37,000,000, and there are 80,000 miles of railroads. It has one of the most beautiful residence sections in the world. It is constructing a boulevard, driveway and viaduct system that will be without an equal in the world. It leads the world in the manufacture of boots and shoes, as a primary fur market, in the manufacture of tobacco, as a great hardware distributing point, and in many other important lines of commerce and manufacture. Its banks and other financial institutions are renowned for stability and confessedly among the solidest in the Union. It is financially independent of New York City, the money center of this country, and at times its banks loan money



A MISSISSIPPI RIVER STEAMBOAT.

in New York on New York security. It has the largest legitimate trade territory of any city in the world and is steadily increasing that territory. Its credit, both in the United States and in foreign money markets, is unsurpassed by that of any other city in the world. Its citizens pay the lowest tax-rate of any city in the Union. It is one of the healthiest cities on this continent, its annual death-rate being among the lowest of all the great American municipalities. In the extent of its municipal improvements, tremendously stimulated by the World's Fair, it is not surpassed by any other American city. Its water-supply, drawn from the Mississippi river, is pure and healthful. Its sewerage system is acknowledged by experts to be among the finest in the world. Its street railway rapid-transit service is unequalled in this country or Europe. As a great railroad center it has no American superior. In the matter of hotel accommodations, again thanks to the World's Fair, it stands comparison with any other city in the world. It has the most beautiful suburbs and surrounding country of any American city. Its importance as a great central supply and distributing point has just received official proof in its elevation to the dignity of an army headquarters post by the United States government.

The one foremost logical deduction to be drawn from the foregoing facts is that the destinies of St. Louis are just now in strong hands. The men who in comparatively a few years have brought St. Louis to a position so commanding must of necessity be exceptionally forceful and compelling men. The only way to judge the ability of men of action is by results. Upon this basis of judgment the present generation of St. Louis men of affairs is far above the average in masterful competency. It is these men, also, who have made the World's Fair. They brought to its making the same energy, enterprise and practical common-sense which had been so effectively exerted for their own success in life and which accounted for the high station held by St. Louis at the dawning of the World's Fair period. Led by David R. Francis, pre-eminently the type of their class in this generation, these St. Louis builders of the World's Fair of 1904 have astonished the world by the quantity and quality of their work. It is one of the few instances in the history of such enterprises where the opportunity and the responsibility were perceived and accepted by men entirely capable of improving the one and accounting for the other with the highest possible credit to themselves.

The making of the World's Fair and the safe placing of St. Louis in a commanding position among American cities, however, were but the larger part of the work done by these typical St. Louisans of the present day. Coincident with St. Louis' preparation for the World's Fair proper arose the great task of so improving the city itself that it should be eminently worthy of the World's Fair. The greatest part of this task naturally devolved upon a municipal administration which, fortunately, had been placed in control of the city's affairs more largely upon the issues created by the World's Fair than upon issues of a political nature. It was a business administration, its first business being to beautify St. Louis for the World's Fair period and thereafter. The men elected to direct the city's affairs throughout this period were, like those placed in important World's Fair positions, finely representative of the best local type—the St. Louisan who does things. They have faithfully devoted their utmost endeavor to a satisfactory



THE ONLY TUNNEL ON THE MISSOURI, KANSAS AND TEXAS RAILWAY, AT ROCHEPORT, BOONE COUNTY.



MISSOURI FARM SCENE IN ST. LOUIS TRADE TERRITORY.



performance of the task imposed upon them and they have succeeded beyond expectation.

Perhaps the greatest work of municipal improvement undertaken for the World's Fair period is that of so additionally purifying the city's water supply as to place it absolutely beyond suspicion on the score of healthfulness and attractiveness of aspect. This is being done by means of a great system of connected reservoirs and weirs at the Chain of Rocks, north of St. Louis on the Mississippi river, where about \$700,000 of the water department's reserve fund is being expended. The basic idea of the plan is the purification of the water supply by settling. The water is to be admitted to an entrance chamber from a low-service conduit and flow from the chamber over a weir 610 feet long, with a

three-foot drop, into a basin 400 feet wide by 670 long. From the surface of this basin the water then flows over the next weir, falling six inches into the next basin and passing to the next weir, falling one foot into the next basin. The next fall is six inches, the next one foot, and so on through the series



A NEW DEPOT ON THE MISSOURI PACIFIC RAILROAD AT BOONVILLE.

of eight, the water falling ten and one-half feet in all from the entrance chamber to the service pipes. The six-inch falls are at weirs which are seven feet wide and the one-foot falls occur during the passage of weirs forty feet wide. The water flows over these weirs in a thin continuous sheet. There are to be no turbid masses pouring great volumes of mud from basin to basin; the transfer from one reservoir, while constant, will be wholly lacking in agitation. The process amounts to the continuous skimming of the clearest water from the top of each basin. From 48 to 60 hours will be the time of the water's transfer from the entrance chamber to the service pipes, and in this period 95 per cent of the foreign matter contained in the water will be precipitated.

Second to this work for the further purification of the city's water supply only because healthfulness must come before beauty is the movement for the permanent improvement of King's Highway into a boulevard and driveway system of surpassing utility and attractiveness. It is intended so to improve King's Highway that it shall give an unbroken connection from the Chain of Rocks on the north to Carondelet Park on the south, touching all the important city parks, the cemeteries and the Missouri Botanical Gardens in its course. A great viaduct system crossing the railway tracks in the south-central section is included in this movement, the viaduct itself, by reason of handsome architecture, ornamented with statuary, preserving the beauty of the boulevard of which it will be a part. The establishment of new parks along the line of this mag-

nificent boulevard and driveway system will also be a feature of the accomplished task. This great movement, the result of a recommendation to the Municipal Assembly of St. Louis made by Mayor Wells in June, 1902, is being vigorously pushed to completion. In addition, many other large tasks of municipal improvement are in process of performance and it is estimated that a total sum of \$10,000,000 will be expended in order that St. Louis shall be brought up to the highest standard of modernity.

The mainspring of a city's prosperity, of course, is its commerce. Pierre Laclede founded St. Louis where it is because, applying the rude rules which the pioneers had learned from their trafficking, he saw that the site would control commercially a vast territory. St. Louis, as it has grown through its one hundred and forty years of development has never lost any trade it has gained, but its influence has yearly widened till it is felt now, in both buying and selling, in every State of the country. That part of the United States in which St. Louis does most business, the west, the south and the southwest, had more railway building to its credit in 1903 than all the rest of the United States put together. These figures, indicating where the largest development of the country is going on, are interesting. The new mileage of the railways in the State, built during 1903 was as shown in the accompanying table.

Of this total 5,652 miles, 3,103.70 was built in Utah, Colorado, Arizona, New Mexico, Oklahoma, Indian Territory, Texas, Missouri, Kentucky, Tennessee, Iowa, Arkansas, Mississippi and Louisiana, the States and Territories where St. Louis sells most of its goods. Into this trade territory in 1903 St. Louis manufacturers and wholesale merchants sent thirteen million tons of merchandise and manufactured product, most of it things to eat and drink and wear and build houses. One million tons more were sent into this trade territory last year than the year before. To those who are accustomed to examining trade statistics these figures are an amazing proof of the great increase in the volume of business in St. Louis.

The past of St. Louis has been rich in achievement. The future of St. Louis is bright with assured promise. The influence exerted by the World's Fair movement has been genuinely wholesome and filled with the soundest inspiration. It has stimulated the best minds of the city to their best endeavor. It has not aroused that unwise spirit which seeks present profit at a sacrifice of future prosperity and stability. There have been no "boom" tactics resorted to during the World's Fair period. The firmest characters of local citizenship have safeguarded the community against this peril, consequently there will be no depressing reaction following the close of the World's Fair. The great local banks have profited by the experience of other World's Fair cities, and, while offering every encouragement to legitimate enterprise, have been enabled to prevent the consummation of perilous projects from which the city would suffer later. Similarly, also, the real estate interests have properly discouraged an inflation of realty values that would mean demoralization in the end. The one aim of the leaders of local thought and action has been so to shape affairs that St. Louis should profit legitimately by the World's Fair to the fullest extent and yet remain secure against an ensuing depression and disturbance of proper values.

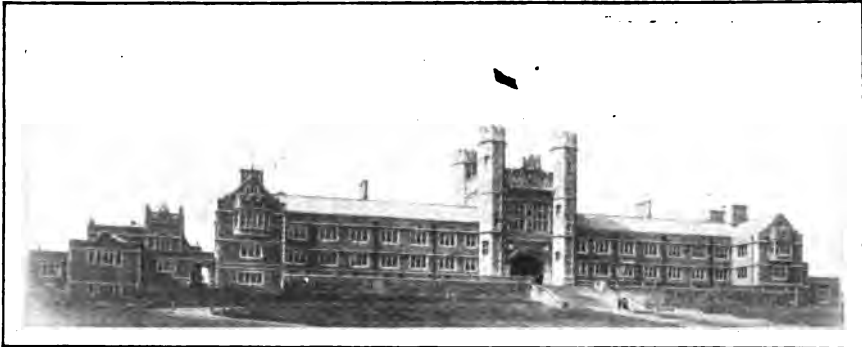
As a result of the dominance of this wise counsel, the World's Fair gain of St. Louis is certain and vast in extent. The city has been favorably brought

MILEAGE OF RAILWAYS  
BUILT IN 1903

Alabama	129.39
Alaska	10
Arizona	107.07
Arkansas	230.77
California	169.55
Colorado	89.07
Connecticut	
Florida	53.05
Georgia	133
Illinois	114.3
Indiana	43.32
Indian Territory	386.8
Iowa	229.2
Kansas	
Kentucky	69.45
Louisiana	389.63
Maine	6.5
Maryland	12.82
Massachusetts	2.37
Michigan	158.68
Minnesota	262.1
Mississippi	116.4
Missouri	236.2
Montana	70.5
Nebraska	
Nevada	20
New Jersey	4.84
New Mexico	158
New York	33.83
North Carolina	94.5
North Dakota	130.57
Ohio	134.19
Oklahoma	660.6
Oregon	21.75
Pennsylvania	286.37
Rhode Island	3.4
South Carolina	34
South Dakota	15.56
Tennessee	114.9
Texas	361.26
Utah	186.16
Vermont	5.25
Virginia	27.42
Washington	111.22
West Virginia	103
Wisconsin	125.48

Total in the 5,652  
United States

to the attention of the entire world. Its surpassing claims as a field for the profitable employment of capital are known in every great money center on the globe. The continent-sweep of its natural trade territory is vitally recognized. Its importance as one of the world's leading manufacturing cities is distinctly appreciated. The increase in population, due to the attracting of permanent residents as a result of the World's Fair, will be great. The wholesome advance of real estate values is assured. The beautifying of the city as a preparation for the World's Fair constitutes a lasting gain of incalculable benefit. The stimulus to greater effort in the immediate future is an inevitable consequence of the new and prouder station now occupied by St. Louis. A spirit of



WASHINGTON UNIVERSITY, ST. LOUIS—BUILDINGS NOW USED FOR WORLD'S FAIR PURPOSES.

exceptional civic loyalty and acceptance of citizenship duties has been aroused. Good government of the municipality is more strenuously insisted upon than in the past. The elimination of politics as the deciding force in municipal elections is viewed with greater favor. The World's Fair has created a cosmopolitan atmosphere which counts for future greatness and dignity. The World's Fair advertising of St. Louis will be beneficently felt for many years to come. The first World's Fair city of the twentieth century holds the strongest position in the center of the world's stage.

The local historian who closes his consideration of St. Louis and its history in the full flush of the World's Fair period does not need to be a partisan to predict the brightest of futures for this city. St. Louis is but at the beginning of the most fruitful era of its existence. It has progressed logically to this point. It has made good its claims at every juncture. The World's Fair celebrating the centennial anniversary of the Louisiana Purchase is but a natural sequence in the fulfillment of the destinies of St. Louis, the metropolis of the Louisiana Purchase Territory. The future greatness of the city is confirmed by its inexorable past progress along its appointed course. This is the soundest and sanest logic of the existing situation. St. Louis, the World's Fair city of 1904, is now about to enter upon its fullest inheritance of well earned prosperity and international acclaim.



SOME CHILLICOTHE SPECIMENS OF HORSEFLESH.



**K**ANSAS CITY, on its western border where the waters of the Kansas and Missouri rivers meet, is the second city in size and commercial importance in the State. It is the third city in size in the domain comprised in the Louisiana Purchase, and the largest city, except San Francisco, west of the World's Fair City.

Kansas City is located on the south bank of the Missouri river and on the east bank of the Kansas river, at the confluence of the two. After nearly two thousand miles southward in its course, the Missouri river here turns abruptly and runs almost due east across the State. Within the city limits, the Kansas river, after a course nearly due east throughout its length, turns abruptly north, emptying into the Missouri immediately at the elbow of the big bend. The one brings its waters from Yellowstone Park, and by its tributaries from the Laramie mountains and Cheyenne, and by Denver from the foot of Pikes Peak; the other from eastern Colorado, much of the southern portion of Nebraska and all of the northern portion of Kansas, a water shed of immense proportions. These water courses are for miles outlined on one or the other of their banks by high hills, locally called bluffs, in some places precipitous and often over two hundred feet high. In this immediate region, it is seldom that the hills are found immediately on both banks of the river. The country on one side is usually level, extending away from the river some distance, and in places a mile or more, to the hills or high plateau-like lands. In the acute angle formed by the junction of these rivers, the bluff is immediately next to the river only for a distance of about half of a mile along the north side of the city where the old town was built and where the steamboats had their landing. Elsewhere about the city the bluffs are some distance from the rivers. This gives a level flat tract in the western part of the city known as the west bottoms, through which the Kansas or Kaw river flows. In this region is located many railway tracks, yards and freight houses, also the union depot, large wholesale and manufacturing interests, the stock yards, and the great packing houses. In the northeastern part of the city there is also a wide level section, several square miles in area, running out to the Missouri river. While this is also chiefly occupied by railways and manufacturing interests, it contains many homes of employees and one amusement park of about ten acres. The greater portion of the city, many of the wholesale houses, all the retail district, the office buildings, the financial institutions, the residences, churches and schools, in fact the city proper, is

*Photo in heading: Convention Hall.*

ARMOUR  
BOULEVARD,  
LOOKING  
EAST FROM  
MAIN  
STREET.



PASEO,  
LOOKING  
SOUTH  
FROM  
TWELFTH  
STREET.

located upon the hills or bluffs stretching to the east and south five to seven miles.

It was only the lowlands or bottoms that suffered from the flood of 1903, and city, State, and national authorities are now engaged on plans to prevent a repetition of the inundation. While the flood was severe and disastrous in loss of property, perhaps more destructive than any city other than Galveston ever suffered, it did not cause a tremor of financial fear, nor were the greatest sufferers in the least disheartened. All buildings and improvements contemplated before the flood were constructed as if it had never occurred. Many of the oldest and most prosperous firms have built new buildings or enlarged their old plants in the flood district since the disaster. This shows the utmost confidence, first in the belief that a like flood will never occur, and second, in the fact that the precautionary measures now under consideration will be adequate to meet all emergencies should another deluge come down the valley of the Kaw.

To write adequately the early history of Kansas City, would be to write the story of the development of all that country west of it, once known as the great plain, for the growth of Kansas City in population, its commercial and industrial expansion, and its financial prestige have been coincident and contemporaneous with the settling and development of the vast region.

In 1826, a branch of the American Fur Company was established by M. Chouteau on the site of the present Kansas City. The Santa Fe trade began in 1831. In 1838 Kansas City, until then known as West Port Landing, received its name. It was, by the way, not named for the State of Kansas. It has a prior claim to the name it took from the Kansas river. In 1846 a public sale of lots stimulated the city's growth. The business of all the border ports was increased by the war with Mexico. On February 22, 1853, the City of Kansas was incorporated by the Missouri legislature. Commercial prosperity for the next decade was remarkable. In 1870 the city had 32,260 inhabitants, and every one bought and sold real estate. The boom burst, as all booms do, and many suffered financial loss, at least for a time. The city and its people have since adjusted themselves to



the new conditions and notwithstanding the individual misfortunes suffered in the "boom days" they gave form and shape to the city. Because of the activity of that time Kansas City is a city of homes, not concentrated and crowded but dispersed. The population grew each year. Manufacturing increased and—there is the Kansas city of to-day.

Kansas City is the gateway to the west. Through Kansas City run the railways that traverse in every direction this mighty domain, in area greater than all of Europe outside of Russia, containing 60 per cent of the area of the United States, but only 14.7 per cent of its population. The greatest part of this area is comparatively undeveloped. The region from Manitoba to the Gulf of Mexico and from the mouth of the Kansas river to the Salt Lake basin is the newest of the United States and, in possibility, the richest. This is the trade territory of Kansas City geographically and by right of commercial conquest. To the inhabitants of all this region she sells her wares and from them buys their products. To her markets are brought the cattle, the sheep and the hogs; and to her mills and elevators the wheat and corn and rye and barley and oats and rice from fifteen states and territories.

Kansas City is situated on the thirty-ninth parallel of latitude. The Lake of the Woods on the northern border of the United States is on the forty-ninth parallel, ten degrees north. Galveston on the Gulf of Mexico near the twenty-ninth parallel is ten degrees south and an imaginary line drawn through the Lake of the Woods to Galveston, bisects Kansas City. She sits exactly midway between the northern and southern boundaries, and nearly midway throughout the greatest length of the United States from east to west. St. Louis is 240 miles to the eastward.

The magnitude of Kansas City's trade territory will be more fully realized when it is understood that it extends to the west over an area contained in a

semi-circle drawn on a radius as great as the distance from Cincinnati to Kansas City, that is a radius of nearly six hundred miles. Not only does she purchase the products of the people of this area, and sell them her goods and wares, but she buys from and sells to the people outside of and beyond it. Her trade territory outside of this area to the east is Missouri and Iowa, to the south, Arkansas, Louisiana, Tennessee and the Gulf States; to the southwest, Arizona and New Mexico and the rest of Texas; to the west, Utah and to the northwest,



NINTH STREET, EAST FROM WYANDOTTE.

Montana and Wyoming. A statistician has recently calculated that her trade territory embraces 30.7 per cent of the area of the United States and contains 17.67 per cent of the population, 12.95 per cent of the assessed wealth, 35.16 per cent of the horses and mules, 39.5 per cent of the cattle, 38.73 per cent of the hogs, 32.12 per cent of the sheep, and its usual wheat crop is 20.46 per cent, its corn 51.46 per cent, its oats 43.25 per cent and its railway mileage 28.82 per cent.

The resources of her immediate trade territory are varied and exceptional. Describe about her a circle on a radius of 150 miles, a very limited area, and look at the situation, see how she is located with regard to other cities and examine the resources at her immediate command in this circumscribed area in which a merchant from the farthest point can reach the city within five hours, or from it receive a shipment of goods within the same time. Within this circle described on a radius of 150 miles is located a total of 119 county seats, 60 in Missouri, 39 in Kansas, 14 in Iowa and 6 in Nebraska. The total population within this area according to the census of 1900, is 2,836,474. In Missouri, 1,579,863; in Kansas, 883,717; in Iowa, 252,708; in Nebraska, 120,186.

In natural products this area contains the great coal fields of Missouri, Iowa, and Kansas, elsewhere described in this article; the world famed zinc and lead district known as the Joplin region which is third largest mining camp in annual value of product in the United States; the clay and shales of Missouri and Kansas from which brick, terra cotta, tile, sewer pipe and pottery are made; the granite, limestone and litholite of Missouri and cement rock of Kansas, all supporting large industries; the lime of Ash Grove, Missouri, and Fort Scott, Kansas; the rich lumber region of the Ozarks, and the wonderful oil and gas region of Kansas. The agricultural wealth contained within the limited area

of the circle outlined above, all within one hundred and fifty miles of Kansas City, is beyond the conception of one who has not actually lived amid it.

In this area there were in 1900, over three hundred thousand farms, the land and improvements of which, other than buildings were valued at more than nine hundred and ninety-one million dollars. The buildings on these farms were valued at nearly two hundred million dollars. The farms, together with all improvements and buildings, were worth the enormous sum of one billion, one hundred and ninety million dollars. The average value of each farm was nearly four thousand dollars. The wealth of such a region as this is the reason of Kansas City's commercial prosperity, and this is only the inner circle of its vast trade territory; to the northwest, the west and southwest, it stretches beyond this half a thousand miles.

Kansas City's government is administered under charter voted 1889, which superseded all laws of the State then enforced pertaining to cities of more than



ON THE PASEO—LOOKING NORTH FROM SEVENTEENTH STREET.

100,000 inhabitants. The debt-making capacity of the city is carefully restricted by the charter; practically no debt can be incurred except by the issue of bonds; no bonds can be issued unless favored by two-thirds of the voters at a special election. In no event can bonded indebtedness exceed 5 per cent of the value of the taxable property, except that the waterworks purchase bonds amounting to \$2,902,000, are not included for the purpose of such calculation. The total bonded indebtedness including the waterworks purchase bonds, and less the cash in sinking fund was on January 1, 1904, \$3,116,740.44. There has been a gain in assessed valuation of taxed property in the last three years of over \$10,700,000, and a gain of 250 per cent in the last 20 years. During this time tax levy has been reduced from 16 mills to 12 1-2 mills on the dollar. The



assessed valuation at present is \$93,541,808. At the special election in September, 1903, the voters authorized the issue of public improvement bonds as follows: Waterworks, \$1,100,000; fire department, \$100,000; hospital, \$225,000; market house, \$250,000; beautifying parks, \$500,000. The financial credit of Kansas City



LINWOOD BOULEVARD.

is unsurpassed. Of the bonds so voted, \$500,000 of the waterworks bonds have been sold at a good premium. The issue of the bonds by the hospital and a portion of the park bonds have been authorized by the council. The other bonds will be issued as occasion may require. A non-partisan commission composed of representatives selected by a civic, professional and commercial organization assists the municipal government in wisely and economically appropriating the fund arising from the sale of the bonds.

The city owns its waterworks system. Its fire department has an international reputation for efficiency. In lieu of all taxes, the Street Railway Company pays the city nearly 8 per cent of its gross receipts, less State and county taxes. The Gas Company can not charge more than \$1.00 per thousand feet for gas, and pays into the city treasury 2 per cent of its gross earnings. The city has always been progressive in the improvement of its streets and the building of sewers. These have been paid for by special tax bills issued against the property benefited. Kansas City has nearly 200 miles of paved streets, mainly asphalt. The drainage is well nigh perfect. Among the public buildings are the city hall, costing \$300,000; market house, city hospital, and a public bath house, the latter erected by contributions of public spirited citizens inspired by the Kansas City Star. The federal custom house and the county courthouse are fine public buildings.

Kansas City has outstripped all of its neighbors in population. If the population of Kansas City, Kansas, is included with that of Kansas City, Missouri,



SOME STUDENTS OF THE MANUAL TRAINING HIGH SCHOOL.

as should be done, the city has 37.4 per cent of the population of St. Louis, or 215,170. While in 1870 Kansas City stood thirty-eighth among the cities of the United States, in 1880 it had risen to the twenty-ninth place and in 1900 to twenty-second place. In these twenty years her population has nearly doubled. Including Kansas City, Kansas, she occupies seventeenth place. Only the accident of a State line separates the two cities, which commercially are one. In the census of 1900 only two cities of 100,000 or more had a greater proportion than Kansas City of native whites of native parents. They are St. Joseph, Missouri, with 67 per cent and Columbus, Ohio, with 60 per cent; Kansas City ranking third with 58 per cent. Foreigners constitute only 11.2 per cent of the population and negroes 10.8 per cent; only three other cities in 1900 had a less per cent of foreign population, St. Joseph, Missouri, Washington, D. C., and Memphis, Tennessee. Kansas City is an American city of the highest type. Its people are thrifty, law-abiding and home-loving. There is little destitution, little squalor. The tenement house has not become a menace.

The record of no development in Kansas City is more interesting than its growth in building operation. Strangers are astonished at the residences built and those under construction. During the last five years the estimated cost of structures for which building permits have been issued was twenty-six million dollars. These permits included 1,160 brick residences and 4,987 frame residences, aggregating in value fourteen and one-half million dollars. It is estimated that twenty million dollars has been expended in the last five years for the erection of residences in Kansas City, and for all structures during this period more than thirty-three million dollars. In the census of 1900 Kansas City stood seventh among American cities in aggregate building operations, yet the total for the last fiscal year was nearly twice as much as for the census year. The extraordinary growth in building has made profitable business in all building material lines. Incident to it has been a development of the brick industry. Six large firms manufacture brick with an annual output of seventy-six million bricks, the largest west of Chicago and St. Louis.

The parent plant, one of the largest manufactories of stove pipe, is in Kansas City. This firm has filled exceptionally large contracts; one in particular for the City of Mexico.

The postal receipts are a reliable index to a city's business prosperity. In gross postoffice receipts, Kansas City ranks thirteenth among the American cities, though twenty-second in population. Her receipts are more than those of New Orleans and Memphis combined, or Omaha and Denver, or Louisville and Nashville combined, or Hartford and New Haven, Bridgeport, Waterbury and Memphis all combined. Postal receipts of Kansas City exceed the postal receipts from presidential postoffices of the ten States of Alabama, Arkansas, Florida, Louisiana, Maine, Mississippi, New Hampshire, North Carolina, South Carolina and West Virginia. In the main office of the thirty-five sub-stations, 440 people are employed. The gross receipts are \$1,101,837.91. The amount of revenue of

the office for the fiscal year was \$784,013.42 with a smaller per cent of expense to the receipts than shown by any office above it in population.

Kansas City is to-day the second largest railway center of America. No city anywhere can offer the merchants or manufacturers better shipping facilities. It is the point from which the railroads can gather the largest tonnage over the greatest area. Of all inducements held out to

locate in Kansas City, and they are numerous, none is of greater value than its superior transportation facilities. Of the total 57,023 miles of track laid in the United States in 1903, over 30 per cent was laid in Oklahoma, Indian Territory, Texas



MANUAL  
TRAINING  
HIGH SCHOOL.  
CENTRAL  
HIGH SCHOOL.  
FRANKLIN  
WARD SCHOOL.



and Missouri. These roads all open new territory that pays tribute to Kansas City merchants and manufacturers. Thirty-nine lines of railway run into Kansas City, with a mileage of fifty-five thousand miles, nearly one-fourth of the United States. These lines traverse thirty-one states and territories. The capitals of sixteen states and three territories can be reached from Kansas City without change of cars. Kansas City merchants and manufacturers have seven trunk lines from Chicago, six from St. Louis, seven from Nebraska and the great northwest, five to Colorado and beyond, eleven to Kansas, seven to Indian Territory, Oklahoma, Texas and the southwest and fourteen to Missouri. These lines reach nearly 12,000 cities and towns direct. The trackage of the railways, including switches, within the city is over 500 miles. More than three hundred freight trains in and out daily handle on the average 12,000 cars a day. More than two hundred passenger trains enter and disappear from the union depot daily and five of the roads do not enter the union depot. The railways have recently announced plans for a \$5,000,000 station. Two new railroad enterprises rapidly reaching consummation, the building of the Kansas City, Mexico &

Orient, and the development of the Union Depot Bridge and Terminal Railway Company promise much for Kansas City. The former line, 1,629 miles long, is the most important railway project undertaken in the United States for years. It brings the city 500 miles nearer to the coast and opens up a country now almost entirely undeveloped, marvelously rich in many resources. The undertaking of the Union Depot Bridge and Terminal Railway is both a transportation and industrial development. The completion of its plans will add much to the wealth and importance of the city. The railway companies in Kansas City's territories have ever prospered. With the completion of plans now underway pointing to greater growth and greater prosperity, Kansas City will enjoy the distinction of having the largest and best transportation facilities of any city in the United States of America.

The live stock business of Kansas City is the most important, the most characteristic and the most rapidly developing phase of its commercial life. Kansas City's live stock business is the second largest in the world and is growing as none other. Its stock yards are the most convenient and the most thoroughly equipped in the country, and the output of its packing plant is exceeded only by those of Chicago. Slaughtering and meat packing in the United States ranks first among the industries in net value of products and second in gross value. In this industry ranking at the top of all the great industries in the United



BURNHAM, HANNA, MUNGER & CO., WHOLESALE DRY GOODS.

States, Kansas City to-day occupies the second place among the American cities. The magnitude of the live stock business astonishes all who have given it no direct attention. It is the largest item in the commerce of the city. More capital is invested in it than in any other; the annual volume of business in dollars is greater than any other; it employs more people; it furnishes greater railroad tonnage, it draws its supplies from a larger territory and sells its products throughout a greater area. Kansas City is the outdoor to the great stock and



PARK COLLEGE, PARKVILLE, PLATTE COUNTY, NEAR KANSAS CITY.

cattle market of the world. Since the stock yards were established in 1871, they have been again and again enlarged, growing from 26 acres to 200 acres. They are paved throughout with vitrified brick, and have every facility for transacting business. The Live Stock Exchange building is the finest of its kind in the world. A more adequate idea of the remarkable growth of the live stock industry may be gathered from a comparison of the receipts of live stock for various years as follows:

The growth of the packing industry is shown in the increased number of animals slaughtered. The increase in the percentage of the receipts consumed by the six local packing houses is more important and significant than the increase in receipts, at the yards. In 1903 the packing houses consumed 525 per

RECEIPTS OF LIVE STOCK AT KANSAS CITY.

	CATTLE	HOGS	SHEEP	HORSES AND MULES
1871	120,827	41,036	4,527	809
1881	285,863	1,614,304	79,924	12,592
1891	1,347,487	2,599,109	386,760	31,740
1901	2,126,575	3,716,404	980,078	96,657
1902	2,279,166	2,279,337	1,154,084	76,844
1903	2,137,112	1,969,381	1,151,730	67,274

cent of all the cattle received during the year, 95.5 per cent of the hogs and 67.2 of all the sheep. A new packing plant costing two million dollars is being built. The value of the products of the Kansas City packing houses for the census year was \$73,205,027. This amount is larger than the value of the entire output of bituminous coal of Iowa, Illinois, Ohio and West Virginia combined. With the increase of business it is estimated that the annual output of the six packing houses is to-day nearly ninety million dollars.

The following table shows the number of cattle, hogs and sheep slaughtered by the packing houses in various years since 1886:

AT THE KANSAS CITY PACKING HOUSES.

	CATTLE	HOGS	SHEEP
1886	100,335	1,688,283	89,163
1890	581,520	2,348,073	199,000
1895	912,245	2,145,131	575,806
1900	1,139,246	2,854,281	629,918
1903	1,123,918	1,881,018	773,982

tion market for the stock products. Annually the great American Royal Show and sale is held here, the greatest exhibition of breeding stock the world has ever seen. Kansas City has become the center of the pure bred cattle industry. One-third of the cattle of the United States are in the states directly tributary to Kansas City. The number has increased more than 30 per cent in eight years. The increased sale is equal to the number of cattle in Great Britain. The possibilities of Kansas City as a live stock market would seem to know no limit short of cessation of increase of population.

Kansas City leads all other cities in the world as a distributing point for agricultural implements and vehicles. That portion of the Louisiana Purchase

The cattle received during 1901 placed in line one behind another would reach from New York to San Francisco. The hogs similarly placed would reach from San Francisco to New York and back to Pittsburg. Facilities have been provided to encourage breeders to make the Kansas City stock yards the auc-



FARM SCENE, IN KANSAS CITY'S TRADE TERRITORY.

that comprises Kansas City trade territory in the implement and vehicle line contains approximately 200,000 square miles, the greater portion of which is rich in farm lands, with a soil that is inexhaustible. Every implement factory of any importance in the United States is represented in Kansas City. The annual sales aggregate twenty-five million dollars, one-fourth of all the agricultural implements manufactured in the United States. The Kansas City Implement Vehicle and Hardware Club is the largest organization of jobbers in one line to be found anywhere, and the Western Retail Implement and Vehicle Dealers' Association is the largest state or interstate organization of retail dealers in any line. Its annual convention brings to Kansas City from three to four thousand retail dealers to Kansas City's retail territory. The annual shipments of implements and vehicles from this point, if bunched in car loads, would approximate eighteen thousand cars or two train loads each working day in the year.

With the increased agricultural production from the territory tributary to Kansas City, it may be safely asserted that Kansas City's growth in the implement business, phenomenal as it has been, has only begun.

Located at the very heart of the grain growing section of the continent, with railroads running throughout in every direction, giving it the best transportation facilities, Kansas City has annually become one of the most important grain and milling centers of the United States. Tributary to her mills and elevators there is almost an unlimited supply of grain. Each year the Kansas City elevators handle more and more of this yield and its mills convert an ever increasing portion of it into flour, corn meal, cereals, products and feed stuffs for long demand and exportation. The grain interest of the city is conducted by the Board of Trade, the sole organization of business men in the city. Each year the receipts of grain of Kansas City have been larger than for the previous year. In 1903 the receipts and shipments aggregating sixty-two million bushels were the largest known. In 1900 the census placed Kansas City ninth in flouring and grist mill products, to-day she would stand above this. Her milling capacity has been increased, and two new mills are being built. One of the mills with a daily capacity of 5,000 barrels, shipped this month twenty-five car loads of flour to South Africa. This mill grinds for export trade only. There are twenty-eight elevators in Kansas City with a storage capacity of 6,320,000 bushels and a handling capacity



BUNCH OF JACKSON COUNTY GRAPES.



SCENE ON STOCK FARM, DE KALB COUNTY.

of 1,518,000 bushels. Other elevators under construction will add a third to the storage capacity. That there is only one cereal mill of large proportions in the city is somewhat astonishing, the bulk of its product being oatmeal, much of which is exported. Kansas City should be the center of the cereal food business of the United States and doubtless will be.

As a wholesale fruit and produce market, Kansas City ranks in importance with cities triple and quadruple her size. Its location makes it the great market place for the fruit and garden products of the west and southwest. A record of the value of last years' business shows: Butter, 10,000,000 pounds, valued at \$2,000,000; eggs, 306,000 cases, \$1,530,000; cheese, \$782,400; poultry, 16,000,000 pounds, \$1,500,000. Fruits combining all classes except berries, \$2,100,000; berries, \$264,000. Vegetables, \$1,500,000; the special lines including dried fruits, game, honey, wax and sundry items, \$1,000,000. No fruit and vegetable market in the United States has promise of a brighter future.

The lumber industry of the United States ranks fourth in the gross value of products. In this important industry Kansas City stands among the first. It is one of the leading lumber centers of the country, and in the sale of yellow pine probably leads. Its manufacturers are among the most prominent in the country. Their mills are located in the yellow pine timber lands of Missouri, Arkansas, Texas, Louisiana and Mississippi, and a daily output of their mill plants ranges from 50,000 to 400,000 feet. A fair estimate of the yellow pine lumber sold in Kansas City in 1903 would be one billion feet. The cypress which is supplanting the white pine is furnishing a large volume of business in Kansas City. The Pacific Coast lumber is handled in an increasing amount. As a hardwood market Kansas City holds a responsible place. There are four large hardwood yards in the city, and one of the largest walnut lumber plants in the world. Practically all of the walnut lumber output is consumed in Europe.

In the sash and door line, Kansas City shows a large business over an extensive territory. The Southwestern

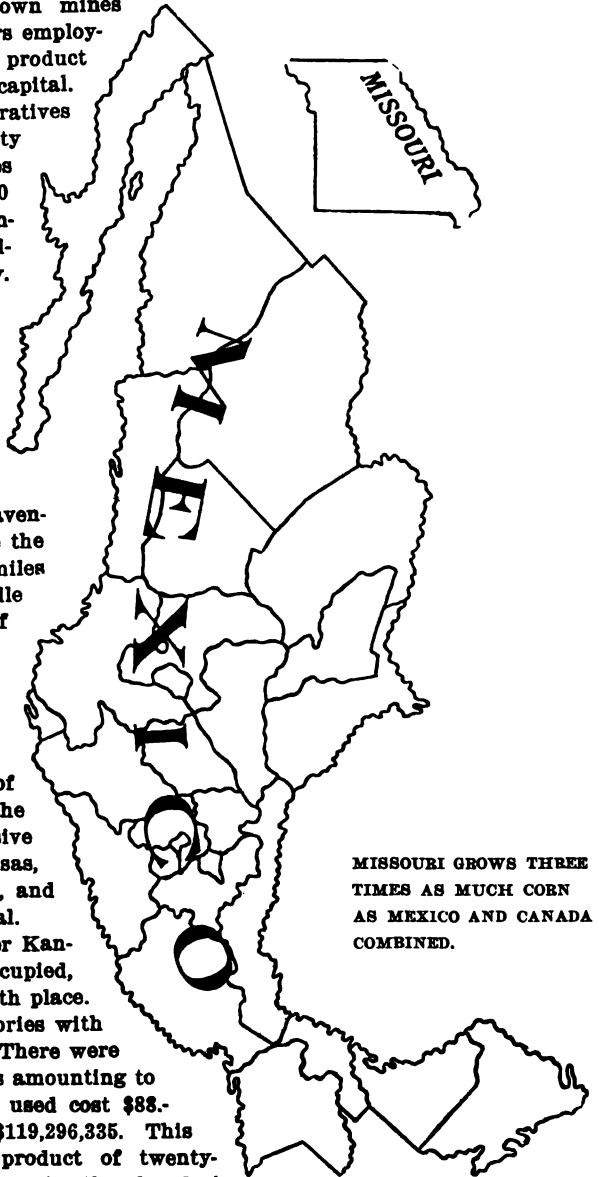
JUDGE THOMAS B. HUDSPETH, JACKSON COUNTY,  
AND HIS FOX HOUNDS.

Lumbermen's Association maintains its headquarters at Kansas City. Its organization has a membership of 16,050. There are upwards of 100 lumber companies in Kansas City. These companies employ a combined capital conservatively estimated at \$40,000,000.

Coal is the alchemy of commerce. It is the first essential in manufacturing, the first essential in transportation. If it can be obtained regularly in large quantities at a reasonable price, and a great variety of raw materials is at hand, two of the chief factors for industrial success exist. Kansas City is especially fortunate in its coal supply. Twenty coal mining companies having an aggregate capital of \$10,000,000, have headquarters here. In addition to the companies operating their own mines there are twenty-five wholesale coal dealers employing at least \$1,000,000, which handle the product from mines not operated by Kansas City capital. Over 125 coal mines employing 15,000 operatives are owned and operated by the Kansas City Company. There are over 100 other mines in the Kansas City field employing 8,000 operatives. These mines have a total annual output of 14,000,000 tons. Four million tons of coal are sold in Kansas City. Two and one-half million are consumed by the railroads, and the remainder for commercial and domestic purposes. Geographically, Kansas City is the center of one of the greatest coal districts in North America. The city is underlaid with two veins of coal, mined within the city limits; twenty-seven miles up the river are the large producing mines of Leavenworth, Kansas; fifty miles to the east are the Lexington and Richmond fields; ninety miles farther east are the Bevier and Huntsville fields giving two of the thickest veins of coal west of the Mississippi river, averaging four and a half feet, and underlying a large portion of Randolph and Macon counties; to the southwest within the distance of one hundred and forty miles are the Kansas fields, which produce one of the strongest steam-producing coals in the United States. On every side are extensive coal fields, those of Iowa, Missouri, Kansas, Arkansas, Indian Territory and Colorado, and all chiefly controlled by Kansas City capital.

Among the cities of the Union, greater Kansas City, as an industrial community occupied, according to the census of 1900 the fifteenth place. At that time Kansas City had 22,089 factories with an aggregate capital of over \$45,000,000. There were employed 25,925 operatives to whom wages amounting to \$12,669,911 were paid. The raw material used cost \$88,600,689, and the value of the output was \$119,296,335. This was larger than the total manufactured product of twenty-seven states. While the gain in population in the decade in Kansas City was only 25.7 per cent, the increase in value of factory output was nearly 57 per cent greater than enjoyed by any other city except Pittsburg, producing an equal or greater output.

Twenty years ago Kansas City was known as a jobbing and wholesale city, to-day it is known also as a manufacturing city. To-day there are more manufacturing and wholesale concerns, and the manufacturing interests greatly exceed the jobbing interests in capital invested, annual sales, number of employes and annual pay roll. The industrial growth is indicated by the Manufacturers







A HERD OF MISSOURI CATTLE FOR FUTURE KANSAS CITY MARKET.

and Merchants Association with a membership of nearly 400 of the largest manufacturing firms representing a great variety of industries. Nowhere is a new concern more heartily welcomed. The people of this territory are intelligent and prosperous; anything that will supply their wants can be successfully and profitably manufactured in Kansas City. The most significant and important phase of the commercial life of Kansas City is the great variety of its interest. It is not a one line city. Other than interests already considered, the more important are dry goods, hats, caps, boots and shoes, millinery and notions, groceries, teas and coffees, drugs, liquor, hardware, machinery supplies, heavy iron, building material, paper, house and electrical supplies. Kansas City stands first as a dry goods market west of St. Louis. The wholesale grocer business is represented by very strong houses. The wholesale hardware business in all its branches is well represented. In the drug business is large capital which has grown remarkably.

Kansas City is the western depot for saddles and harness.

Not only the live stock, grain and agricultural implement businesses have grown more rapidly or more substantially, but Kansas City has become one of the best millinery markets in the country. One coffee house roasts its own product, grown on its own plantation in Mexico. The development in its electrical supply has been very great. The increase in the manufacture and sale of paints, oil and varnish has been large. The seed business is one of the largest west of the Mississippi. Ten houses are engaged extensively in jobbing jewelry and watch supplies, making the city stand fourth in the United States in this regard. The wholesale crockery and queensware business is represented virtually by one house, established over forty years ago, which has prospered ever since, and ships entirely to the Coast. A Kansas City music house is the second largest in the United States. Almost every line is represented in the wholesale field. In 1880 the bank clearings of Kansas City for the year amounted to one hundred and one million dollars. In 1903 they amounted to ten hundred and seventy-four million dollars. Nothing better indicates the commercial growth and importance of Kansas City than these figures.



LADY BRITON 16TH 90715, SWEEPSTAKES COW AT THE PAN AMERICAN EXPOSITION, C. G. COMSTOCK & SON, GENTRY COUNTY.

ates the commercial growth and importance of Kansas City than these figures.

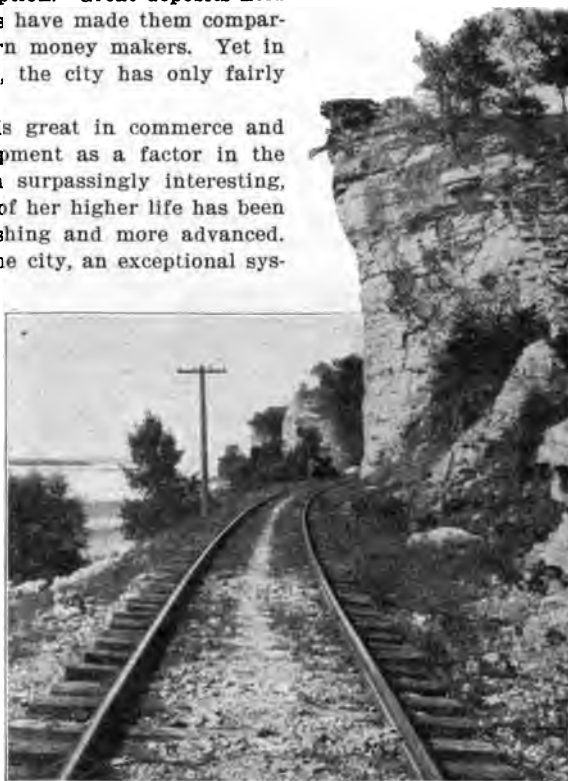
Kansas City's financial prestige is very great. No city in the Union anywhere near her in size can in any way compare with her in financial importance.



IN FEED LOT OF CLARK &amp; HOUSEHOLDER, AUDRAIN COUNTY.

Twenty-second in population, she is eighth in bank clearings and oftentimes seventh. Only New York, Chicago, Philadelphia, St. Louis, Boston and San Francisco stand regularly ahead of her in bank clearings. The combined capital and surplus of Kansas City's eighteen banks amount to ten million dollars. They have a deposit of eighty million dollars. The clearings for 1903 were the largest in the history of the clearing house. One of the banks is the largest west of Chicago with one exception. Great deposits held by the Kansas City banks have made them comparatively free of the eastern money makers. Yet in banking as in commerce, the city has only fairly begun to grow.

While Kansas City is great in commerce and industry and her development as a factor in the business world has been surpassingly interesting, the growth of all phases of her higher life has been more rapid, more astonishing and more advanced. Early in the history of the city, an exceptional system of public schools was established, the growth and expansion of which has demonstrated the wisdom of its founders. The board of education, in which the two great political parties have been for thirty years equally represented, has been notable for the character, ability and public spirit of its members. The schools have a national and international reputation for efficiency. The Manual Training School has become a model. Kansas City has more high



RIVER AND RAILWAY, NEAR KANSAS CITY.

school scholars in proportion to its population than any city in the federal union. Liberality has ever been manifested by the tax payers in voting bonds for school purposes. The school tax is nine mills on the assessed valuation of eighty-six million dollars. The school buildings are of model school architecture. The public library, which is part and parcel of the school system, is a masterpiece



SCENE IN SOUTHWEST MISSOURI MINING

of school architecture. The four high schools are especially noteworthy. The citizens are prouder of nothing than of Kansas City's public school system. Aside from her public schools, Kansas City offers other unusual educational advantages in professional, parochial and private schools. Kansas City's public library, administered by the board of education, has for its home a classic and well-appointed building. The library contains about 50,000 volumes, is free to all residents of Kansas City, and is used by a greater percentage of the population than any library in the United States. To add to its practical use seven substations are maintained in the more distant schools, and a branch in a handsome building at Westport.

The school and the church go hand in hand and no less characteristic than the development of the Kansas City schools has been that of her religious life.



PONTIAC C.—STATE AGRICULTURAL COLLEGE FARM.

One of the most interesting phases of the religious life of Kansas City is the building of so many churches in the outlying residence districts. All denominations are represented and all religious organizations. One hundred and eighty church edifices are to be found within the city limits. The buildings are models of church architecture, ornaments to the city, and evidence of the liberality of their membership.

The establishment of the elaborate park and boulevard system is the most signal example of the Kansas City spirit.

The park system under the management of the Park Board comprises 1,874 acres of parks, 215 acres of parkways, and twenty-six miles of boulevards, one of the most beautiful and harmonious park and boulevard systems in the United States. The system is comprehensive; each portion has been planned with relation to every other and the whole to give embellishment to all the city and to serve all of its inhabitants. Throughout the center of the residence portion of the city from north to south runs the Paseo, a magnificent parkway, while the Parade, the central playground of the city adjoins the Paseo about midway of its length. The parks are beautiful and picturesque, with lakes, fountains, forest trees, winding drives and open playgrounds. The elaborate system of boulevards encircles the city and connects nearly all the parks. The boulevards are most modern in con-



DISTRICT IN KANSAS CITY TRADE TERRITORY.

struction, are wide, well paved, bordered with wide walks and rows of trees on either side, and along those in the newer sections of the city, costly houses are being rapidly erected. The total cost of the park system exceeds six million dollars.

To-day in Kansas City exceptional, but for her not unusual conditions prevail in all lines of business. The number of real estate transfers have increased from year to year. The rapid extension of the street railway system has been responsible for the great demand for residence property in outlying districts. Great retail branches of business are not less well represented in the city than the wholesale manufacturing interests. Many are moving into new and better stores. The humanities of life are cultivated.

Chas. Dudley Warner has written: "I can only express my admiration of the indomitable energy and spirit of that portion of the west which Kansas City represents, and congratulate it upon so many indications of attention to the higher civilization without which its material progress would be wonderful but not attractive."

Kansas City has always been fortunate by being served by able and clean newspapers. One has the largest circulation of any paper published in a city with no more inhabitants. The Star, with its morning edition, the Times, the Journal and the Evening World, are vigorous and influential. Kansas City has grown marvelously in newspaper and periodical publishing, and in book and job printing.

A prosperous people build commodious and beautiful houses. Nothing in Kansas City will more forcibly impress the visitor with the prosperity of the city than its great number of elegant homes. Every facility is offered for social enjoyment. Large theaters, attractive clubs and prosperous library, social and musical organizations. Business and professional organizations are prominent. The Priests of Pallas week is a notable harvest home occasion.

A city can not be greater than her citizens. Kansas City is the outcome of the Kansas City spirit. Within half a century, the people of Kansas City have reared upon an uncouth and unattractive spot a wonderful and in many respects, a model city, clean politically, beautiful materially, aggressive commercially, and stable financially. Nothing has ever been too good for the citizen of Kansas City, either in his own home or for his own city.

The audacity and pluck and comradeship of the people have made the Kansas City spirit. Since the early days, all questions have been approached by organized effort. The building and rebuilding of Convention Hall is evidence of what Kansas City means. This building 198 by 314 feet in size was built by popular subscriptions. It was the building of all the people, for all the people, to be conducted for the benefit of all the city without hope of gain. The National

Democratic Convention of 1900 had been secured for the city, to meet in Convention Hall. It was to convene on July 4. Midday April 4 the hall burned. Before the sun went down upon the day, contract for rebuilding and making it fire proof in time for the National Democratic Convention was let and subscriptions began pouring in. The convention was held in it on time. The magnitude of the performance can be comprehended, when it is known that the original subscriptions had to be more than duplicated and that the building is steel construction, with a truss roof, without pillar or post to obstruct the vision, or mar the sound. It was estimated that during the National Convention 30,000 people were in it at one time. It is adapted to almost every conceivable entertainment or gathering, such as grand opera, horse shows, balls, band concerts, industrial expositions, bench and poultry shows, flower shows, bicycle races, all of which have taken place in it. It is a great auditorium and stands a monument to a people great in civic pride, great in determination, and great in ability to execute their plans. A photograph of Convention Hall is in the heading to this chapter.

When it is remembered that 60 per cent of the total area of the United States is west of Kansas City, and that it contains only 14.7 per cent of the population, a faint conception is had of what development may still be expected in this region, and how Kansas City will grow as a result thereof. Kansas City's lines of communication cover this section like a gridiron. All lines of railway to



REGISTERED ABERDEEN-ANGUS OF W. E. & HAMILTON CONE, SCOTLAND COUNTY.

the west converge here. From here they diverge, and like the ribs of an open fan spread out over all this region to every nook and corner, every prairie settlement and mining camp, every stock ranch and lumber mill, every cotton plantation and wheat and corn field, bringing the wealth of them all to Kansas City, here to be turned into the finished product or retransported to the east and north and south, or across the seas.

When this domain knows the development the region east of Kansas City now enjoys; when its fields are tilled as are the fields of Ohio; when its mines of coal and iron are worked as are the mines of Pennsylvania; when the cotton of its plantations is manufactured into the finished fabric where grown, as it now is in the south; when its slaughter houses have still increased until their capacity consumes the entire supply of live stock; when the ore of its lead and zinc and copper mines is converted at home into the finally finished product and not transported across the continent, or exported, to be reduced to the ultimate article; when its lumber before bearing transportation charges is made into articles of utility and beauty; when its natural gas lights the fires of its own furnaces and mills and shops, it will be as great in industry as it is to-day in agriculture and stock raising. It will be an industrial and commercial domain greater and more prosperous than modern history has known, and Kansas City will be as it is to-day, its commercial, industrial and financial metropolis.



**S**T. JOSEPH is the third city in the State in population, in commerce and in wealth. It is the county seat of Buchanan county, and the metropolis of "The Platte Purchase." For a distance of one hundred miles, the Missouri river is the boundary line between Missouri and Kansas, and then it cuts its way through the central counties of Missouri and unites with the Mississippi river twenty miles above St. Louis. St. Joseph is located on the great east bend of the Missouri river, 300 miles by rail above St. Louis; by river 556 miles to the northwest. From Jefferson City, the State capital, St. Joseph is by rail 245 miles.

The first settler at the foot of the Black Snake Hills, now the site of St. Joseph, was Joseph Robidoux, of St. Louis, a trader with the Indians. A treaty negotiated with the Sac, Fox and Iowa tribes brought what is known and included in the territory now embraced by the counties of Platte, Buchanan, Andrew, Holt, Nodoway and Atchison into Missouri as a conclusion of "The Platte Purchase" in 1838. Joseph Robidoux pre-empted the 160 acres of land on which he had located, and on which the main business portion of St. Joseph was built. In 1843 the town of St. Joseph was laid out. A special charter was granted in 1851. California emigrants made St. Joseph their outfitting point and the city was fairly launched on its commercial growth.

In 1861, William A. Davis, who had been in the postal service for more than 30 years, conceived a scheme to distribute the mail bound west of the Missouri river, on the cars between Hannibal and St. Joseph. He placed his scheme and drawings for distributing cars in the hands of Major J. L. Bittinger, then postmaster, who, having examined the plans, forwarded them with his recommendation, to Postmaster General Blair. A special agent was sent to

*Photo in heading: Live Stock Exchange; Library Building.*

C. D. SMITH DRUG COMPANY.

LETTS-  
SPENCER  
GROCERY  
COMPANY.NATIONAL BISCUIT  
COMPANY.

St. Joseph with orders to confer with Mr. Davis, and inaugurate the business of distributing the overland mail on the cars. It proved to be the greatest improvement ever made in the postal service. Mail is now distributed in special mail cars all over the country, and the railway postal service been adopted in many foreign lands.

In 1871, a company was organized to bridge the Missouri river at St. Joseph.

The city voted \$500,000, and bonds were issued to the amount of \$500,000. The bridge was completed early in 1873. At this time new lines of railroad were projected. In a few years several additional lines were completed, until now there are fourteen leading lines which connect St. Joseph with every section of the United States, Canada and Mexico. No city has better transportation facilities for trade. The city has made enormous

strides in growth, commerce and manufacturing within the last ten years.

Fourteen hundred traveling men, representing St. Joseph business houses, cover the territory west to the Pacific Ocean, north to the Canadian line, south to Mexico, and east as far as Ohio.

The business men of St. Joseph are possessed of great foresight and enterprise, but are not of the speculative character. They are energetic, but conservative. They have a strong, stubborn way of doing things. They have insisted upon a clean, honest city government, and have generally succeeded in obtaining it. Few cities are so free from municipal corruption. The affairs of the city are economically administered. No official has ever been charged with corruption.

The population of St. Joseph in 1846 was 936. In 1850 it was 8,932. In 1866 it was estimated at 12,000. In 1870 the United States census gave it as 19,565.

In 1880 it was 32,431. In 1890 it was 52,324. In 1900 the United States census showed that the city had nearly doubled its population—102,979. It is now estimated at 105,000. Thus it is shown that only one city in the United States—Los Angeles, California—has equalled it in growth during the ten years from 1890 to 1900.

The natural advantages of St. Joseph as a commercial and manufacturing city are unsurpassed. It is in the heart of the most fertile section on earth,

famous for its varied and wonderful resources and prolific production. The permanence and prosperity of the city is founded upon fortunate location, established institutions, accumulated wealth, merited prestige and successful achievements. The stability and prosperity of no city in the west is better assured than that of St. Joseph. In the span of one lifetime it has grown from a trading point

to an eminent commercial city, an important railroad and financial center, and an established market in every way, of national prominence. It is a city where the majority of the residents own their homes. The merchants, manufacturers, and most people in business own the buildings in which they trade. There is hardly a vacant house in the city, business or residence, and in nearly every case new buildings command tenants before their completion. Prices for real estate are no higher than those prevailing ten years ago, while in the meantime the population of the city has

doubled, and the real value, when compared with other cities of the same population, is much above present prices. As a distinguishing feature, the people of St. Joseph are permanent, contented, steady and reliable, as compared with the transient, restless and nomadic elements that seem to concentrate in other large commercial centers.



TOOTLE, WHEELER & MOTTER.

RICHARDSON-ROBERTS DRY GOODS CO.

JOHN S. BRITAIN DRY GOODS CO.



FROM THE WEST BANK OF THE MISSOURI RIVER.



From the highest point in St. Joseph there is a magnificent landscape view west over the Kansas valley and the highland prairie. To the south lies the valley of the Missouri river, so rich that it has produced unfailing crops of wheat, rye, oats, corn and hemp.

The hills bordering the valley rise 200 feet, wooded from foot to top, while the prairie spreads out like the billows of a gently rolling sea. It is one of the great fruit growing sections of the world. The timber in the woodlands is varied and ample. The climate is mild and pleasant. There is no healthier region. Nowhere on earth in a like area is there grown as many horses, mules, cattle and hogs. Nowhere as much wheat, rye, oats, and corn. Nowhere as much fruit. The vast prairie region tributary to St. Joseph is wide, grand, open, not dull nor flat, but rising and sloping—a landscape scene of width comparable with naught but itself. Prairies there are in other lands with far-spread arid grasses and brackish lakes, but here are the fertile prairie lands of America, bountifully watered by rivers, creeks and streams.

St. Joseph was incorporated as a town under special charter, in 1845; as a city, under charter, in 1851. It includes within its incorporated limits an area of nine and one-half square miles. It has 152 miles of streets, of which sixty are paved with asphalt, brick, macadam or granite; has six miles of main sewers and sixty miles of district sewer. Its government is vested in a mayor and a council. Its bonded debt, less cash in the treasury January 1, 1904, was \$925,000, bearing interest at 3 1-2 and 4 per cent. It has no floating indebtedness. Its assessed valuation is \$30,000,000, which is from 35 to 50 per cent of actual value. On this basis, a tax of \$1.45 is levied. The State, school and county tax levied on the same basis, are \$1.30. Five city parks furnish pleasure grounds for the people. The various departments of the city government, public works, police, fire and heat and light, building, board of health and others are conducted upon modern lines. Free public library, established in 1890, now



INTERIOR OF NATIONAL BANK OF ST. JOSEPH.

contains 29,000 volumes. It is housed in a beautiful building provided by the school district at a cost of \$107,000. The Carnegie Branch, erected from a gift of \$25,000 from Andrew Carnegie, is in South St. Joseph.

The city hall and public market house, the United States government postoffice, the county courthouse, the Home for Little Wanderers, the Memorial Home for Aged People, the State Insane Asylum No. 2, the county asylum for

the poor, the union station, the Young Men's Christian Association building, the Y. W. C. A. home, are excellent public buildings.

There are two splendid hospitals—the Sisters and the Ensworth. The first is equal to any in the State, and the latter is also excellent.

The public schools of St. Joseph are supported with an annual expenditure of \$250,000. They are among the best in the west. The school district embraces fifteen square miles of territory, owns thirty-two buildings, operates thirty-five schools, employs two hundred and seventy-eight teachers. At the last school census there was an enrollment of 11,054 pupils in the public schools. There are numerous and excellent private and parochial schools, among them: Antoine Kindergarten, Robidoux Kindergarten, Y. M. C. A. Evening School, St. Peter's German-English Lutheran School, St. Paul's Evangelical Lutheran Parochial School, Cathedral Parochial School, School of the Immaculate Conception, St. Francis Xavier Catholic School, St. Mary's Catholic School, St. Patrick's Girls' Parochial School, St. Peter's and Paul's Catholic School, Christian Brothers College, Convent of the Sacred Heart, Platt's Commercial College, St. Joseph Business University, Ensworth Medical College, Central Medical College.

There is no wholesale market west of St. Louis equal to St. Joseph. Other enterprising cities on the Missouri river have grown up, but in commerce none have been able to compete with St. Joseph. It is to-day the fourth largest wholesale dry goods market on the continent. There are four large houses in this line, using a capital of \$3,000,000, employing over 200 traveling men, and making annual sales to the amount of \$20,000,000. Their trade extends over the whole territory west of the Missouri river, the British possessions, Alaska, Mexico and the Pacific Islands. The immense dry goods business of St. Joseph has attracted many other interests to locate here, among which are wholesale groceries, hardware, boots and shoes, hats and caps, queensware, and also manufactories of various kinds.

Over one million dollars worth of millinery goods are sold at wholesale by the jobbing millinery houses of St. Joseph. These houses give employment to over five hundred people in the manufacture and distribution of their goods. Thirty-eight salesmen cover the territory west of the Missouri river to the coast. The wholesale millinery business is steadily increasing and keeping pace with the other large jobbing interests.

St. Joseph is a great market for paint specialties, covering the entire United States on some of these manufactured specialties. In the wholesale paper trade, St. Joseph has one firm, Sheridan-Clayton Paper Company, that is the largest handlers of tablets, and one of the largest supply houses in America. In the wholesale drug business, C. D. Smith Drug Company and the Van Natta-Lynds Drug Company embrace seven states and territories in their trade, with a volume of business approximating \$2,000,000. The receipts of produce in St. Joseph indicate the extent of the city as a produce market. For a single year these approximated a million dollars of poultry; \$1,500,000, of eggs; \$2,500,000 of butter and



\$6,000,000 of fruits and vegetables. An interesting comparison shows that the receipts of produce in 1868 were \$150,000, and they had grown to nearly \$9,000,000 in 1903.

Manufacturing industries of St. Joseph have increased immensely in the past twenty years. There is no more desirable location for manufacturing.



BENTON CLUB HOUSE, ST. JOSEPH.

Transportation facilities and the vast extent of territory drawing its supplies from here make St. Joseph an attractive manufacturing point. The Buell Manufacturing Company, said to be the largest in the United States, manufactures blankets, robes and flannels, which are shipped direct from the mills to almost every State in the Union. The two largest manufacturers in the world of duck

and denim clothing are located here. Seven firms are engaged in woollen manufacturing with four thousand operatives. There are five large boot and shoe factories. Wyeth Company manufactures a great amount of tinware, saddlery and harness, and have a large trade in Mexico. The Perfection Pump Company ships its products in car load lots all over the United States. The National Biscuit Company, with three large flour mills, the St. Joseph Plow Manufactory, the Mokaska Manufacturing Company, manufacturing roasted coffees, spices and baking powder, are large and growing institutions. The manufacture of cigars is a large industry. The manufacture of confectionery, jellies, fruit, butters and mince meat is larger than any other city in the west. The furniture and cooperage works have long been established. The manufacture of carriages, buggies and wagons is a prosperous business. The hominy mills use hundreds of thousands of bushels of white corn grown especially for them. Of foundry and machine shops there are a number, and more needed. There are a half dozen steam laundries. The St. Joseph Skirt and Waist Company employs forty people. There are three large breweries, the annual product of which is 60,000 barrels. Altogether, the manufacturing industries number nearly 200, and over 8,000 em-



BIRDS' EYE VIEW OF

ployes. The aggregate value of manufactured products is estimated at over \$30,000,000, and is growing at a rapid rate year by year.

There is probably no city in the Union, of the same size, as noted for pure milk as St. Joseph. Most of the milk supplied is furnished by nearby dairies, and is delivered twice a day from the farm. A large proportion of this milk is handled through milk dealers, who do a wholesale as well as a retail business.

Prominent among these are the American, the Lewis, Electric and Western Dairy Companies. The Western Dairy Company is the largest. It handles in addition to milk, a large quantity of cream and make a special feature of the manufacture of ice cream, a great deal of which is shipped to outside towns and the rest sold locally. It is estimated that St. Joseph uses about 13,000 gallons of milk daily, and as the demand increases the territory from which this milk is brought is extended. About one-eighth of the amount used is shipped in on the railroads now. The largest dealers in cream and exclusive manufacturers of pure creamery butter are the Blue Valley Creamery Company. They buy cream exclusively and make during the flush, a car load of butter a day and pay out one-half a million dollars a year for the raw material. Although less than three years old, this is the largest creamery in the world.



COMMERCIAL CLUB BUILDING, ST. JOSEPH.

The retail business of St. Joseph has kept pace with its other industries. In all lines of commercial activity there has been progress and advancement. The result has been not only a city of business, but a city of homes.

As a grain market St. Joseph has made wonderful advancements during the past year, and perhaps the largest gains of any other city in the great central valley, it being so favorably located at the corners of the four greatest grain producing States in America, Missouri, Iowa, Kansas and Nebraska, and on the Missouri river, and with ample railroad facilities both in and out, and three large independent grain elevators and others being now contracted for, and also four large mills with elevators connected. The St. Joseph Board of Trade was organized about one year ago, and has already since its organization increased the



ST. JOSEPH STOCK YARDS.

UNION STATION, ST. JOSEPH.

BUCHANAN  
COUNTY  
COURT  
HOUSE.POSTOFFICE  
AND  
FEDERAL  
BUILDING.

grain business of St. Joseph to such an extent that it has gone beyond this continent for an outlet. St. Joseph is now one of the foremost inland markets of the country on exports, and will continue to grow in importance and business, because of its natural advantages and its geographical position.

St. Joseph is one of the important seed markets of the United States. Among the leading firms are the Chesmore-Eastlake Company, The Faber Seed Company, Mitchellhill & Company, and the Missouri Valley Seed Company. St. Joseph is in the center of the best agricultural territory in the world, and the seed market will continue to grow as the territory develops.

An infallible index to the commercial importance of any city or section is afforded by the transportation facilities which it enjoys and which are indispensable for its development. The following lines constitute the present railroad facilities of St. Joseph: Atchison, Topeka & Santa Fe railway, Burlington & Missouri River railroad, Chicago, Burlington & Quincy railroad, Chicago Great Western railway, Chicago, Rock Island & Pacific railway, Hannibal & St. Joseph railroad, Kansas City, St. Joseph & Council Bluffs railroad, Missouri Pacific railway, and St. Joseph & Grand Island railway. These lines and systems of which they form a part have a total mileage of 61,114 miles, and traverse the States of Missouri, Iowa, Illinois, Minnesota, Wisconsin, Michigan, Indiana, Ohio, New York, Pennsylvania, Maryland, Kentucky, Tennessee, Mississippi, Alabama, Arkansas, Louisiana, Texas, Kansas, Nebraska, South Dakota, Wyoming, Montana, Colorado, Utah, Nevada, California, Indian Territory, Oklahoma, New Mexico and Arizona territories, the Dominion of Canada and the Republic of Mexico.

Situated on one of the main waterways of the continent, at an elevation which precludes the possibility of danger from flood, in the center of a fertile section producing an abundance of grain, live stock, coal and timber, having manufacturing, wholesale jobbing houses in all of the principal lines, extensive modern stock yards and packing houses, great railroad systems whose lines reach the great lakes, the tide waters of the Atlantic and Pacific oceans and the Gulf of Mexico, St. Joseph is a natural distributing point for a vast territory. This fact having been recognized by the railroads at an early date, the city has been for

W. W. WHEELER.



A. J. AUGUST.



JOHN S. BRITAIN.



T. F. VAN NATTA.

SOME ST. JOSEPH RESIDENCES.

years a basing point for freight rates between the Mississippi valley and the west, which has materially aided in the development of its industries, and, thereby, renders its commercial supremacy unassailable, and assures St. Joseph's continued advancement.

The street railway system of St. Joseph has been largely improved within the past year. The company has twenty-four miles of street railway, has erected new power house, car barns and shops. The extension to Lake Contrary has brought about the building up of one of the finest and most extensive pleasure resorts in the west. The Lotus Club, located at Lake Contrary, is considered one of the finest institutions of its kind west of Chicago. The St. Joseph Railway, Light, Heat and Power Company is building a new station costing over \$250,000, with a capacity to supply electric light many years. The St. Joseph Gas Company has in use fifty-six miles of main pipe, and has a capacity of furnishing two million cubic feet of gas every twenty-four hours. The city owns an electric street lighting plant costing over \$100,000, operating 421 arc street lights, which plant will soon be enlarged to twice its capacity.

The St. Joseph Water Company has over 100 miles of mains and 801 fire hydrants. The water supply is from the Missouri river, and is free from sewage contamination, being at all seasons of the year pure and healthy.

St. Joseph has never been a boom town. It has no cheaply constructed buildings, no city lots gone back to farming purposes. St. Joseph has always been noted for its steady and solid growth. The charge of over conservatism might almost rest against its first forty years. Built up by men of wealth and rapidly increasing fortunes, it became known and respected for its solidity, credit, and uninflated values. The enterprise injected during the last ten years by younger men on the foundations of sound values already established, has made St. Joseph not only the envy of its neighbors, but a model for much older and larger cities. During the year 1903, buildings aggregating \$1,949,457 were built in St. Joseph, and yet there is need for hundreds of dwellings and flat buildings for the steady influx of new people into the city. Several new office buildings have recently been built, and yet there is such a demand for office rooms that all can not be suitably supplied. St. Joseph has a real estate board of thirty members, always alive to the best interest of the city. St. Joseph needs more flat buildings, more office buildings, more store buildings, more dwellings. No better place in the west for a profitable investment than right in hustling, bustling, enterprising St. Joseph.

product shipped, and as equally large or larger percentage of growth in other directions. During the last year 624,979 cattle and 599,189 sheep were received at the yards. The growth of St. Joseph's stock yards industry is shown geographically when it is noted that in five years the number of cattle received has increased 169 per cent; the number of hogs 64 per cent; the number of sheep 393 per cent, and the number of horses and mules 94 per cent. During the last year there was received at the stock yards, cattle aggregating in value \$21,874,267; hogs, \$20,406,768; sheep, \$2,995,945; horses and mules, \$2,058,000.

The growth and importance of St. Joseph is indicated in striking fashion by the very simplicity of these statements regarding the past and present business of the city. It is solid and substantial with a large and hopeful future. Its trade territory covers sections unequalled for fertility and resource. Its people are intelligent, energetic and alert, and, under the leadership of the Commercial Club and other organizations and individuals, St. Joseph promises to continue and increase the marvelous prosperity which it has known in the last few years.



GERMAN AMERICAN BANK.

Millions have already been expended in these substantial improvements, and vast sums will be expended in the future for additional packing houses and enlargement of yardage capacity, which assures the future of St. Joseph's packing and stock yards interest. The great packers who have sustained the market in such a magnificent manner and made it possible for St. Joseph to assume the fourth position among the great markets in the country are, Swift & Company, Nelson-Morris & Company. The Hammond Packing Company, and the Krug Packing Company. Wherever American meats are consumed, the products manufactured by these famous packers are a synonym of all that is good, pure and wholesome. The establishment of this great industry in St. Joseph has been the means of the building of a miniature city of homes in the southern portion of the old city.



ON LAKE CONTRARY.

The district adjacent to the stock yards and packing houses now possesses a population exceeding 12,000, and the residence and business portion, which six years ago was practically farm land, now represents a valuation of more than \$2,145,000, and the demand for residences is greater than the supply. The post-office of south St. Joseph is also a barometer of the importance of the live stock and packing industry to the city. The gross receipts for 1899 totaled \$10,389.18, whereas the gross receipts for 1903 aggregated \$22,456.92, or an increase of 111.6 per cent. Nearly all trains stop at the South St. Joseph union station for mail, and in addition there is a street car service to the transfer station at St. Joseph union depot, to which are dispatched eleven closed pouches daily. There is also a rural free delivery from this office, on which was delivered and collected 11,108 pieces of mail during the month of December, 1903.

The St. Joseph Live Stock Exchange Building is the handsomest and most convenient structure of its kind ever erected for the convenience of the live stock trade. Upon this structure \$125,000 was expended. It contains offices of the St. Joseph Stock Yards Company, the St. Joseph Stock Yards Bank, the St. Joseph Cattle Loan Company; all commission merchants, packers and others interested in the live stock business.

As the packing houses of St. Joseph are the most modern, the cattle yards are also conceded to be without a parallel. In construction, sanitation and facilities for handling business, they have no equal. It is properly so when the rank of St. Joseph as a live stock market is considered. From an inconsequential position in the packing world in 1898, St. Joseph, in 1904, has risen to the fourth largest packing center in the world. In cattle, hogs, sheep and lambs, horses and mules, the growth of St. Joseph stock markets has been phenomenal. The Stock Yards Company has a capital of \$1,650,000; employs 275 men. It has a daily capacity of 15,000 cattle, 20,000 hogs, 15,000 sheep, and 2,000 horses and mules. In the last five years the receipts of live stock have increased 107.7 per cent, and the shipments 92 per cent. The packing houses have a floor space of 65.25 acres. The daily slaughtering capacity is 7,950 cattle, 19,500 hogs; 5,500 sheep, and 10,000 poultry. The cost of plant and equipment, \$2,635,000. The packing houses show an increase of 84 per cent in five years in the pay roll; 84 per cent in amount paid for live stock; 98 per cent in the number of cars of



product shipped, and as equally large or larger percentage of growth in other directions. During the last year 624,979 cattle and 599,189 sheep were received at the yards. The growth of St. Joseph's stock yards industry is shown geographically when it is noted that in five years the number of cattle received has increased 169 per cent; the number of hogs 64 per cent; the number of sheep 393 per cent, and the number of horses and mules 94 per cent. During the last year there was received at the stock yards, cattle aggregating in value \$21,874,267; hogs, \$20,406,768; sheep, \$2,995,945; horses and mules, \$2,058,000.

The growth and importance of St. Joseph is indicated in striking fashion by the very simplicity of these statements regarding the past and present business of the city. It is solid and substantial with a large and hopeful future. Its trade territory covers sections unequalled for fertility and resource. Its people are intelligent, energetic and alert, and, under the leadership of the Commercial Club and other organizations and individuals, St. Joseph promises to continue and increase the marvelous prosperity which it has known in the last few years.



GERMAN AMERICAN BANK.



**J**OPLIN, the mining metropolis of southwest Missouri, is the commercial center of the great lead and zinc district, which produces four-fifths of the entire zinc output of the United States. It is the fourth city of the State, having a population of 30,000, as shown by an unofficial census taken by the school enumerators, May, 1903. The history of Joplin dates from August, 1870, when E. R. Moffitt and John B. Sergeant struck a rich body of mineral in the Joplin creek valley, and mining commenced in real earnest. Joplin has had three booms, or periods of great business activity, but has never experienced a set-back, such as sometimes follow a great wave of prosperity. Her growth has been steady, every one of the censuses showing an increase in population, and her business, educational, religious and social side of life have kept pace with her rapid growth and development.

During the year 1872, five lead smelters were built, and by 1876 the number of furnaces had grown to seventeen, all of which were run at full blast both day and night. In 1873 it was discovered that the lands contained deposits of zinc ore far greater in value than the lead, and the production of this mineral is the leading industry of the district. The lands in and around Joplin have only been partially developed, there being yet hundred of acres yet unprospected, and it is believed that the richest ore deposits have not yet been discovered. P. L. Crossman, deep driller, who has sunk several drill holes 2,000 feet or more deep, says that at depths of from 400 to 600 feet there are still richer deposits than have yet been developed, and it is probable that millions of dollars worth of zinc will be taken from old mines when the surface minerals have been mined and turned into money.

The output of Joplin mines for the year 1903 amounted to \$2,876,590, and the grand total of the entire district, including the mines of within twenty-five miles of Joplin, was \$9,471,840, being an increase of \$40,505 over the year 1902. There are two kinds of marketable zinc, the sulphide of zinc and the silicate of zinc. The first kind of zinc ore is commonly called jack, and is shipped away from Joplin to zinc factories where fuel is within easy reach, as it is cheaper to transport the zinc than ship coal. The silicate of zinc is used in Joplin and reduced at the Ozark Zinc Oxide Company's works. Silicate of zinc is manufactured into zinc-white and is used as a base for paint. A trifle over a seventh of the mineral mined in Joplin is lead, most of which is consumed by the Picher Lead Company in the manufacture of white lead. This is the only plant in the world producing "Sublimed White Lead," so called because it is made by sublimation under the patent process invented by E. O. Bartlett, the general manager of

*Photos in heading: Street Scene; Mining Scene.*

the company. This pigment is a uniformly fine white amorphous lead oxysulphate, which, being made direct from the ore by high heat under proper conditions, is free from all the acid effects of corrosion, does not crack or peel, and has a stability which is unequalled. Use and test for many years have demonstrated its superiority to all white leads. The Picher Company now makes and sells 7,000 tons annually, with an increasing demand. The works are modern, especially equipped, and represent an investment of \$250,000. Besides the above production of white lead the company makes 10,000 tons annually of "Missouri Soft" pig lead.

Joplin is a city of self-made men, nearly every one of the moneyed citizens having made his fortune there. They are largely American born and American educated. For thirty years there has never been a strike or labor disturbance to mar the natives' good name.



JOPLIN CLUB.

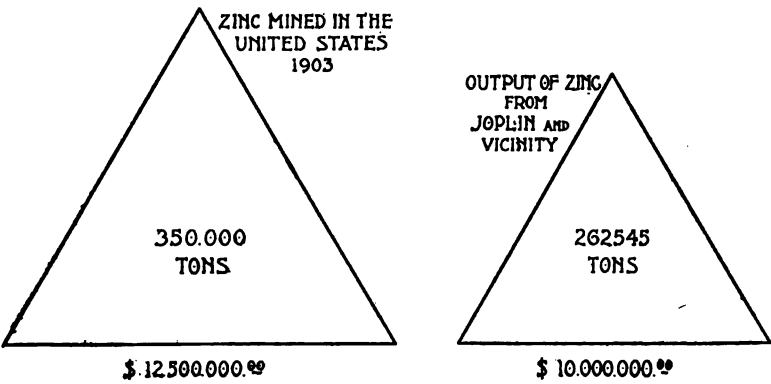
Mining, though the leading occupation of the people of Joplin, is not the only one. In addition to the many and varied trades and business, there are ten wholesale houses, eleven large foundries and machine shops (one covering over three blocks of ground), six factories, including a baking plant covering four blocks, a coffee roasting works, a 200-barrel flouring mill, and numerous other commercial institutions. Six banks, one building and loan association and a trust company represent the financial interests of the city. The capital of the banks amounts to \$340,000 and the deposits aggregate \$2,624,584.73. The loans, discounts, bonds and stocks of these institutions amount to over \$2,050,000, and the undivided profits and surplus January 1, 1904 foot up

\$528,351.40. The financial stability of Joplin can best be told by the statement that there is not a dollar's worth of bank stock on the market. A block of \$20,000 worth of stock of one of the banks recently sold for 185. One of the banks is a United States depository.

Saturday night in Joplin is a sight worth going miles to see. All the banks of the city are kept open from 7 until 8, and over \$100,000 is paid out from the several counting rooms. Then the operators receive pay for the week's turn in, and miners and other laborers are paid their week's wages. From 8 o'clock until midnight the stores are crowded with people making purchases, paying the week's grocery bill, laying in supplies for the next week, and "swapping experiences." Fully one-fourth of the week's business in the stores is transacted on Saturday night.

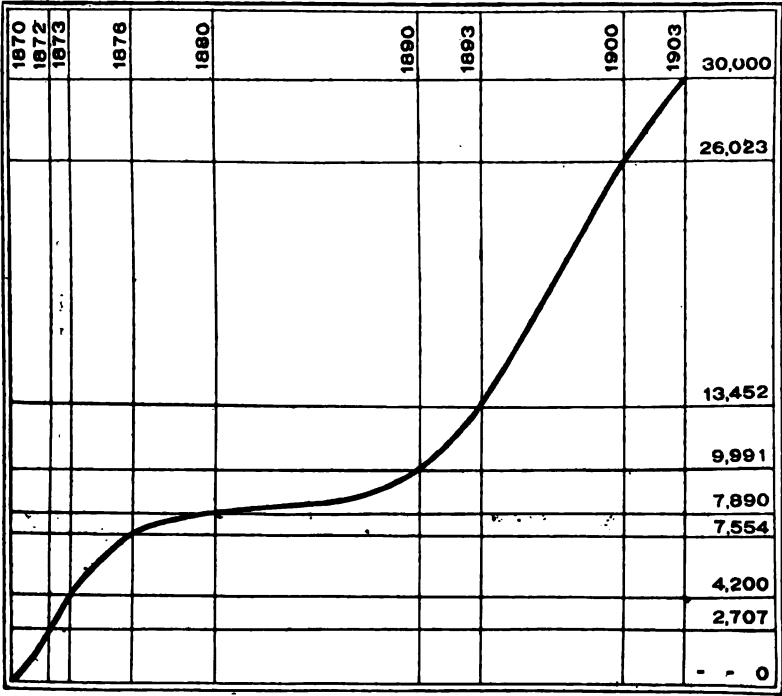
Joplin has splendid telephone service; the Home Telephone Company has 1,100 'phones in the city and 1,650 free connections in the neighboring towns, and the M., K. & T. Company has 900 city 'phones and connections all over Missouri, Kansas and the Indian Territory. Both companies have long distance connections. The city maintains a splendid system of public instruction. There are fifteen well-built and thoroughly-equipped school buildings, presided over by a competent corps of 116 teachers. Graduates from the high school are admitted to the State University, Harvard, Yale, Columbia and other institutions of learning without examination. In addition to the public school system, Joplin supports a college and ladies' seminary, the latter being under the supervision of the Sisters of Mercy. There are seven ladies' clubs which devote the hours of meeting to literary pursuits.

The religious sentiment of the city is very pronounced, there being twenty-five churches of various denominations. The Y. M. C. A. of the city also accomplishes much good. It maintains a club building costing \$20,000, and has in connection therewith a well equipped gymnasium, library and auditorium.



In the fraternal way and socially Joplin ranks high. Each of the great fraternities has strong organization. The Scottish Rite Masons have a commodious and elegantly appointed cathedral, and degrees up to and including the thirty-second degree are conferred in this beautiful rite. The Odd Fellows number over 1,100 members and are building a \$30,000 hall for the use of their several bodies. The Elks are building a handsome \$25,000 club building. When finished it will be the most complete in detail and appointments of any building of the kind in southwest Missouri. The Eagles and Knights of Pythias both have formulated plans for building. Fraternal insurance societies number over 4,000. The Joplin Club, an organization of business men, has been a powerful agency for good in the building up of the city.

Joplin is well supplied with transportation facilities. The Frisco-Memphis system, the Missouri Pacific, Kansas City Southern and the Missouri, Kansas & Texas all have lines running into the city, with a total of forty regular passenger trains a day and a freight business of over 400 cars



GROWTH OF JOPLIN SINCE THE FOUNDATION OF THE CITY.

each week. Joplin has also a splendid electric railway service, with lines running to all the neighboring cities and towns and to the important mining camps in the district. Joplin is particularly fortunate in the stability and excellence of its streets, roads and highways. They have been built under the Hudson special road law.

The waste material from the mines is used for road making and railroad ballast. During the past ten years the streets and roads have been built in a systematic way. In the city there are in addition to three and one-half miles of

brick and asphalt streets, one hundred and twenty miles of gravel macadamized roadways, smoothed and compacted by a fifteen-ton roller, and since 1896, the special road district of Joplin has spent \$103,000 in building and repairing the suburban roads leading into the city. During the past five years over fifty miles of new roads in the neighborhood of Joplin have been built.

The Cunningham Park, a bower of beauty in the southwest portion of the city, a gift to the people by the mayor, T. W. Cunningham, is a popular pleasure resort. This plot of ground, covered with trees and shrubs, comprises fifty-six lots and is in easy reach of the street car



MINERS BANK.

line. It is contemplated soon to expend a considerable sum of money on this resort by the construction of a lagoon and also an auditorium for the use of summer Chautauquas and lodge celebrations and conventions. Joplin has a good system of waterworks. There are in the city forty-eight miles of water mains, and the daily consumption is over 2,000,000 gallons. The filtering plant has a capacity of 5,000,000 gallons daily, and as the city grows the supply can be increased. A recent chemical analysis of the water of the city showed it to be 97.5 pure. The city owns its electric light plant, which is managed by a non-political board of public works. The gas works has a plant which cost \$300,000, and has a capacity of manufacturing 5,000,000 cubic feet daily.

On account of its location and natural resources, Joplin is destined to be one of the great cities of the State. It is especially fitted for a distributing point, being the center of the great mining district of southwest Missouri and southeast Kansas. In a radius of ten miles from Joplin there are eleven towns and cities ranging from 500 to 2,000 inhabitants and making a population in the aggregate of over 80,000. All of these cities and towns are connected by electric railway lines.

One of the old-time Joplin miners recently described to a visitor from the east to the Joplin district: "We make a living on both sides of the land, on top and below; we raise fifty-three crops a year, one of garden truck, berries and fruit from the land, and fifty-two crops a year from below the surface, a turn in of lead and zinc each week."



SCOTTISH RITE CATHEDRAL, JOPLIN.

# SPRINGFIELD



**S**PRINGFIELD is the Queen City of the Ozarks. Its history dates from the year 1830, though it was not until 1870, in which year the

St. Louis & San Francisco railway reached Springfield that the city began its remarkable growth. While in 1870 the population of Springfield was 7,500, it was in 1900 23,267, and there are now fully 33,000 inhabitants in Springfield, including the compactly settled territory directly adjoining the incorporated lands. Springfield's commercial position

can best be judged by what she is and by the character of the tributary territory. The city is 238 miles from St. Louis, 202 from Kansas City, 282 from Memphis and 177 from Fort Smith. Its wholesale trade covers at least one half of an area 350 miles east and west by 150 miles north and south, and amounts to over ten million dollars a year. Add to this the output of the factories, most of which is shipped out, the sum is \$17,500,000.

A significant feature of this section is its steady and rapid development. The new residences erected in 1900 were not less than 400, and most of these were fine buildings. Many new manufacturing enterprises were started last year, and others will be established this World's Fair year. The best feature, after all about Springfield is the beautiful homes of her people. These Springfield homes are placed in large lots with grounds shaded with maple, oak and elm trees.

Altitude has an important bearing upon the healthfulness and the products of a country. Official figures give the altitude of Springfield at 1,345 feet. As the surrounding country is also high, here is nature's sanitarium. Unquestionably, there is no more desirable all the year round climate, or a section of greater diversity for the production of fruit, vegetables, grain and grass than the country surrounding Springfield. The city is fortunate in having good natural drainage, and having added thereto 32 miles of excellent sewers. It has 25 miles of brick paved, macadam and gravel streets, and 100 of brick sidewalks. The city is noted for its healthfulness; diseases especially fatal to children have never prevailed; malaria is unknown.

Springfield rates fourth among the Missouri cities in postal receipts, which have increased nearly \$25,000 in six years. One thousand one hundred families surrounding Springfield are served with daily mail delivery from the federal government's \$150,000 postoffice building.

The city has eight banks with deposits more than twice as large as any other city in the State except St. Louis, Kansas City and St. Joseph. The amount of deposits in the St. Joseph and the Springfield banks was at the last report over \$5,600,000.

Springfield is a railroad center. The Frisco, one of the greatest systems in America now allied with the Rock Island operating together 15,000 miles, have seven lines into Springfield with sixty-four freight and passenger trains daily. The city is division headquarters of the Frisco. The main shops are located here. The Frisco Hospital is in Springfield, and the annual pay roll of the

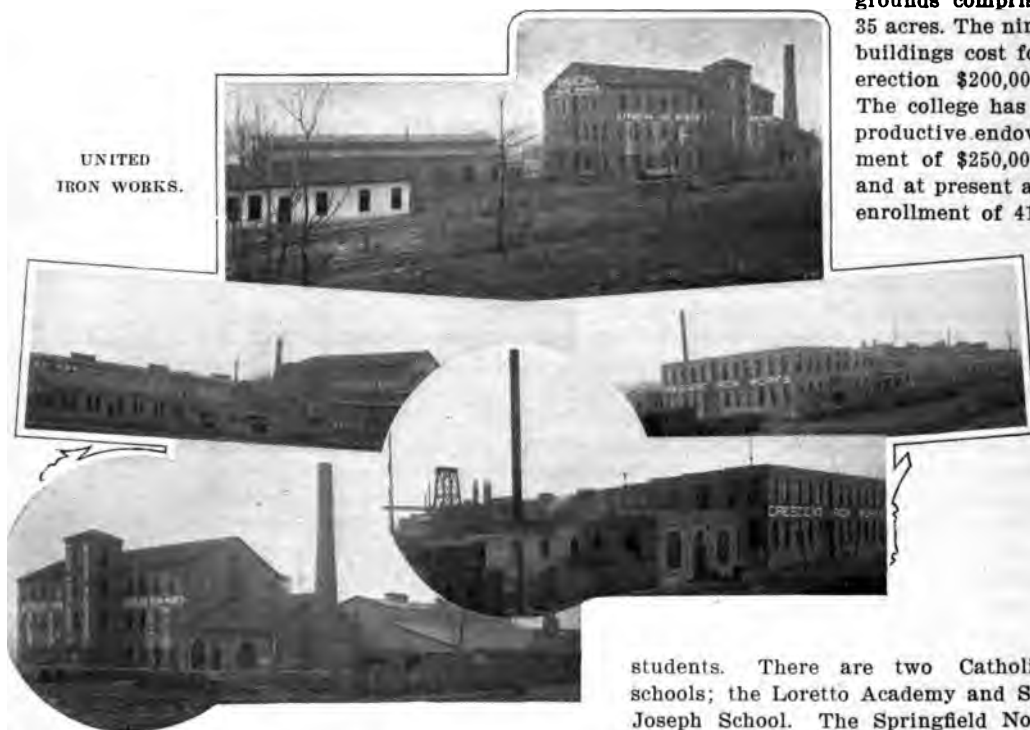
*Photos in heading: Street Scene; Commercial Club Building.*

2,000 railway employees aggregate \$2,500,000. Nearly \$1,500,000 is received at the Springfield railway stations, passenger and freight business yearly. The arrival and departure of trains are so arranged that citizens can leave in the morning, ride 150 miles, more or less as business may require, have plenty of time for their work, and return home the same day. The city is within six hours by rail of St. Louis, the same of Kansas City, eight hours of Memphis, ten hours of Oklahoma City and eighteen hours of Chicago. It is estimated that 400 traveling men reside in Springfield.

The people of Springfield, Greene county, of which Springfield is the county seat, are strong supporters of their public schools which are in excellent working order. It is the fourth city in Missouri in the number of pupils enrolled, having 7,465. Drury College is a notable educational institution. The college

grounds comprise 35 acres. The nine buildings cost for erection \$200,000. The college has a productive endowment of \$250,000, and at present an enrollment of 415

UNITED  
IRON WORKS.



students. There are two Catholic schools; the Loretto Academy and St. Joseph School. The Springfield Normal School, the Queen City Business

College, Clark's Shorthand Business College, have large enrollments.

The Carnegie Library constructed in 1903 at a cost of \$50,000 is maintained from the public funds. Springfield has churches of all denominations; the aggregate value of the church edifices exceeds \$500,000 with a membership of nearly 8,000.

Springfield Club House, costing \$30,000, is one of the treasures of the city. The building is delightfully located, and its membership reaches the strongest and most progressive citizens. The Baldwin Theater costing \$100,000 is the best arranged and most beautiful theater in any city in Missouri outside of the three great cities. Doling Park is a favorite and beautifully kept summer resort. There are several country lodges near the city in the neighborhood abounding in rare and beautiful scenery. St. John's Hospital is a beneficent institution.

There are two daily newspapers in Springfield, the Leader-Democrat and the Republican. The Express and Sunday Tradesman are weekly, while the Practical Fruit Grower, the Sunny South, the Policy Holder, the Opportunity and the Baptist News are monthly.

Springfield is well supplied with telephone systems. The Home Telephone Company, has 1,555 telephones in operation. The Missouri and Kansas Telephone

Company, a branch of the Bell Telephone has in operation about a thousand telephones. The Springfield Waterworks Company, a private corporation, takes its supply from deep springs three miles from the city, and furnishes pure and abundant water. Its present capacity aggregates 100 gallons per capita. The Gas and Electric Company has its plant equipped with modern apparatus, and is giving unexcelled service. There are two street railways in Springfield. The Springfield Traction Company, with sixteen miles, and the Kickapoo Electric Line, with two and one-half miles of operated track. The total assessed valuation of the city of Springfield is \$7,107,110, with an indebtedness of but \$156,000, provided for by sinking funds, with a city tax of 90 cents on the \$100 valuation.

Fruit growing is the leading interest of the Ozark country. Springfield is practically the center of the great Ozark district. In orchards and berry plantations hundreds of thousands of dollars are invested in this region and much more will be invested within the immediate future. Train loads of apples are exported direct from Springfield to Europe.

Buyers from all the leading markets of the United States, England and Germany come to Springfield for information and supplies. Two cold storage houses, holding 65,000 barrels of apples, and numerous canning factories and fruit evaporators have been erected in Springfield and the neighboring region.

LOVAN  
SADDLERY  
COMPANY.



BALDWIN THEATRE.

YOUNG MEN'S  
CHRISTIAN ASSOCIATION  
BUILDING.

There are three extensive wholesale poultry farms in Springfield, doing an annual business of three quarters of a million dollars. There is no better section for raising poultry.

Springfield obtains her coal from eastern Kansas, and semi-anthracite from Arkansas. The wood supply comes from the immediate country surrounding the city. The headquarters of the Armour Refrigerator car lines for all the





ON EAST WALNUT STREET, SPRINGFIELD.

southwest country are in Springfield. The Springfield Furniture Company employs ninety men, with an annual business of \$150,000. In the manufacture of lime, Springfield leads the State. The Marblehead Lime Company had an output last year of \$85,000, and employed sixty men.

Springfield is a great market for hay and grain. It is a natural distributing point. The prosperity rests largely upon the manufacturing and wholesale business. The wholesale dealers include: Springfield Grocer Company, \$150,000; McGregor-Noe Hardware Company, \$300,000; Upham-Gordon Company, \$100,000; Rogers-Baldwin Hardware Company, \$150,000; Springfield Hat Company, \$40,000; Crighton Provision Company, \$50,000; Keet-Rountree Dry Goods Company, \$200,000; Swift and Company, Poultry, \$25,000; Simmons-Burks Clothing Company, \$60,000; Blain-Seamans Grocer Company, \$40,000; Springfield Seed Company, \$20,000; Stewart Produce Company, \$10,000; M. Scharff and Brother, \$40,000; G. D. Milligan Grocer Company, \$250,000; J. Altchul, Jr., and Company, \$75,000; Hobert Lee Tie and Lumber Company, \$100,000; Springfield Candy Company, \$15,000; Springfield Produce Company, \$7,500; International Harvester Company, Springfield Paper Company, \$10,000; Southwestern Paper Company, \$20,000; Martin Brothers, Pianos, \$75,000; Hall-Pipkin Drug Company, \$50,000; Armour Packing Company; A. Rebori Fruit Company, \$35,000; total, \$1,822,500. Telegraph and telephone companies, \$6,000. The leading manufactories are: Springfield Wagon Company, \$75,000; Springfield Furniture Company, \$75,000; United Iron Works, \$650,000; John F. Myers and Son Milling Company, \$150,000; Wunderlich Cooperage Company, \$10,000; Link Milling Company, \$50,000; Stone Milling Company, \$350,000; Springfield Ice and Refrigerator Company, \$150,000; Springfield Brewing Company, \$75,000; Queen City Ice and Refrigerator Company, \$40,000; Marble Lead Lime Co., \$100,000; Anchor Room Works, \$3,000; Elsmayer-Sanford Saddlery Company, \$60,000; Lovan Saddlery Company, \$150,000; Springfield Crystallized Egg Company, \$50,000; H. D. Silsby Stove Works; Jess & Sturdy Carriage Makers, \$12,000; Woods-Evertz Stove Company, \$50,000; Jewell Publishing Company, \$10,000; Springfield Bottling Works, \$12,000; Moore Manufacturing Company, \$25,000; Young, Nayne and Kearby Mfg Company, \$6,000; Davis Planing Mill Company, \$15,000; Anheuser-Busch Brewing Company; total, \$220,000; grand total, \$2,049,300.

With a progressive population and splendid natural facilities, Springfield's future as the metropolis of the Ozark region is assured.



**S**EDALIA, the sixth city in size in Missouri, is the county seat of Pettis county. It is essentially a railroad shop and manufacturing city, with the advantages which accrue in addition as a result of being located in one of the richest agricultural districts in the west.

Named for a daughter of General George R. Smith, Sedalia was incorporated by act of Legislature, February 15, 1864. It is located about two and one-half miles from a point where lines from the opposite corners of the State intersect. The city covers about six square miles and its site was a high rolling prairie, now covered with thousands of trees. The population by the census of 1900 was 15,231. The growth since the census has been steady at the rate of about 1,000 each year.

Notable among the attractive features of Sedalia are the beauty and finished condition of its 80 miles of streets, avenues and boulevards. The municipal policy adopted in the early history of the city of planting trees on all streets has resulted in giving the appearance of its being located in a forest. Over thirteen miles of paved streets have been laid. The business streets which carry the main traffic and heavy trucking are paved with vitrified brick on a concrete foundation. The residence streets are generally paved with either Trinidad rock, or California asphalt. The municipality owns a public park, well located, beautifully ornamented, with assembly hall, speed-ways and baseball grounds. Forest Park with large refreshment hall, band stand and every convenience has been recently opened in the southern limits of the city.

Sedalia draws its water supply from the Lamine river. The water is pumped from settling reservoirs which hold sixty-five million gallons of water, and forced through filters. The city has constructed a complete system of sewerage at an expense of nearly \$125,000. The natural drainage of Sedalia is admirable. The fire department, equipped with modern means of fighting fire, affords adequate protection. The Pettis county courthouse, costing \$100,000, paid for in twelve years, is a magnificent stone building situated in the center of the entire square in the heart of Sedalia. The city hall is a handsome two-story brick building, costing \$40,000. The government postoffice building is a fine pressed brick and cost \$50,000. The public library building is a beautiful structure of white terra cotta and Carthage marble in the pure Greek style of architecture. It was erected in 1900 as a gift of Andrew Carnegie. The library is supported by a tax upon the assessed wealth of the city. The total assessed valuation of Sedalia is \$5,000,000. The city hospital is a substantial structure. The Missouri, Kansas & Texas railway system maintains a large well-equipped hospital in Sedalia. Twenty-four church buildings, representing the leading denominations, are found in the city.

*Photo in heading: Pettis County Courthouse.*

BUSINESS  
BLOCK.SEDALIA  
POSTOFFICE.

The public school system of Sedalia stands high and has met with the praise and approval of those competent to judge. There are ten school buildings. The high school has a four years' course, and is articulated with every academic course at the State University. The George R. Smith College for colored people, and two large and flourishing business colleges have large attendance.

The daily press is represented at Sedalia by the Capital, a morning republican paper, and by two evening papers, the Democrat and the Sentinel, both democratic. Besides there is a German weekly paper and a weekly social paper, and the daily papers each publish a weekly newspaper.

There are three electric plants in Sedalia selling light and power, and lighting the streets, also a steam heating plant, which from a central station furnishes steam heat through underground pipes laid in the streets to most of the buildings in the business part of the city and a large part of the residence district.

Four electric street car lines radiate from the business section to every part of the city, and have aggregate length of twelve miles. There are two telephone systems in the city, the Bell and the Queen City, and both have long distance connections.

The main line of the Missouri Pacific Railway Company runs through the city and it has a line from Sedalia to Kansas City also by way of Lexington. The main line of the Missouri, Kansas and Texas Railway Company from St. Louis to Galveston, Texas, also goes through Sedalia, and it has two branch lines from Sedalia, one to Hannibal and one to Kansas City and Paola, Kansas. The Sedalia, Warsaw and Southwestern Railway runs from Sedalia south to Warsaw and will eventually be extended to Springfield and Arkansas. The coach shops of the Missouri, Kansas and Texas Railroad and the repair shops of the Missouri Pacific Railroad are both located at Sedalia, and at each are employed about 300 men. The Missouri Pacific Railway Company has just located its general shops at Sedalia, which will soon be built at an expense of a million and a half dollars and will employ over two thousand employees. These shops will increase the population of the city within two years 10,000.

With railroad lines radiating from Sedalia in eight directions it is naturally becoming a jobbing point of considerable importance. About thirty firms engaged in wholesale business are doing a business of over two million dollars per annum. For the same reasons manufacturing has begun in the past few years, and 35 factories employing about 600 operatives with an aggregate investment in plants of \$1,564,000 are marketing an annual output of over one million dollars, and paying wages to the amount of about \$15,000 per month.

The prominent characteristics of Sedalia and Sedalians are civic pride, public spirit, liberality and progressiveness. Under an original system, peculiar to this locality, all the city officers and members of the school board are divided equally between the two great parties, the nominations of either party, however, not being effective until ratified by the opposing party, the conventions of both parties meeting separately at the same time in the same building for this purpose. Every indication points to Sedalia's phenomenal growth.



**H**ANNIBAL, the metropolis of northeast Missouri, is a substantial and beautiful city of 16,000 inhabitants. Here in 1846 was held the first public meeting west of the Mississippi river to promote the building of a railroad between that great river and the Pacific ocean. In 1855 the Hannibal & St. Joseph railroad was opened for through traffic, and Hannibal began its continual growth. In 1870 the Wabash railroad was built to Buffalo. In 1871 a bridge across the Mississippi river was finished, and the same year the Missouri, Kansas and Texas railway was completed, thus giving to Hannibal a through line to the east, to central Missouri, to Texas, and the Gulf of Mexico. In 1878 the St. Louis and Hannibal railway was opened to traffic, giving to the city two independent passenger and freight lines to St. Louis and the south.

The site of Hannibal was not selected by accident. It is located along the river, and on the north slope of a fertile valley and the surrounding hills. The neighboring farming counties are reached from Hannibal by extensive systems of free rock and gravel roads. The drives in the city are famous. One, overlooking the Mississippi river and the great valley beyond, leads to the famous "Mark Twain" cave in which "Tom Sawyer" lost his way. Another to the north, one-half way between the water and the hill top, brings into view the noble river, here and there studded with green isles, with the Illinois heights rising from its opposite shore.

The city was a pioneer in municipal ownership of public utilities. In 1887, it established the first municipal electric light and power plant in Missouri. Cheap electric power is supplied to manufacturers, and all comers are offered this remarkable inducement. The tax rate is low in Hannibal, being for city purposes but 60 cents on the one hundred dollars valuation. The United States Circuit Court, and the United States District Court for the Eastern Judicial District of Missouri, hold each two terms a year in Hannibal. The city is well organized municipally with a non-partisan board of public works and the machinery necessary to good government. Its postoffice receipts indicate its commercial expansion. In four years they have grown over thirty per cent. Within four years, four important mail trains, two rural free delivery routes, and two sub-stations have been added to the postoffice facilities.

Hannibal is strong financially, not having had a bank failure in twenty years. Her four banks have a capital stock of \$230,000, have gained in surplus

*Photos in heading: Two views of city; Mississippi River Bridge.*



LOVERS' LEAP.

and undivided profits over 45 per cent in fourteen months, and over 18 per cent in deposits. Hannibal citizens, as a rule, own their own homes. Four prosperous building and loan associations have helped to this good end. The assessed valuation of four million dollars, or an actual valuation of ten million dollars, indicate the worth of Hannibal property. In 1900, according to the federal census, the city had a population of 12,790; while in June, 1903, the population is shown by actual count to be 16,529, a gain of over 30 per cent in two years.

The topography of the site is such as to afford the best possible natural surface drainage, which has been aided by a complete system of sewerage, that drains into the Mississippi river, and insures freedom from accumulating refuse. There are many miles of splendidly paved streets and avenues, in the construction of which the natural drainage has been systematically aided, insuring at all times a remarkably clean city. To the exceedingly favorable climatic conditions prevailing at Hannibal, the abundant supply of good water and good drainage, is attributable the exceedingly low death rate and the almost total absence of typhoid fever and similar diseases.

The water supply at Hannibal is taken from the Mississippi river, the water plant being owned and operated by a private corporation. The pump station is located on the river but one mile above the city, with filtering appliances and storage reservoirs. The plant has a pumping capacity of eight million gallons daily, and a storage capacity of seventeen and one-half million gallons. There are 21 miles of delivery pipes and 160 miles of double fire hydrants. The water as delivered to the consumer is clear and wholesome and the water rates reasonable.

The Hannibal gas plant is owned by a private corporation. The gas which it furnishes for fuel and light is at the ordinary rate in cities comparatively situated. The Hannibal Railway and Electric Company, a private corporation, operates four and one-half miles of electric road, affording rapid transit for all principal parts of the city, and enabling men of moderate means to occupy homes in the suburbs.

Hannibal has the advantage of being located on the Mississippi river, that great regulator of freight rates, and enjoys the distinction and the benefits of having more railroads and better passenger and freight traffic facilities than any other city located on the Mississippi river between St. Louis and St. Paul. Hannibal, as a railway center, possesses numerous advantages not enjoyed by any other city of equal size and importance in the west. With the exception of St. Louis, there is not a city of 10,000 inhabitants and upwards, that is anything like so favorably located. This city is practically on the same rate basis to all points as St. Louis. It has the same rates as St. Louis, to all points in the east and northeast, to the north and northwest, to the west and southwest, and practically the same to the lower Mississippi valley and the southeast. There are four different systems entering the city, with five trunk lines (see map) leading in every direction.

The river transportation is an important factor, boats plying regularly between Hannibal and St. Louis, and Hannibal and all river towns and cities north, to and including St. Paul. On account of the river grade of the St. Louis, Kansas and Northwestern, it is possible to haul longer trains and with less expense than is possible on any other railroad in the State. For this reason, the freight rates between St. Louis and Hannibal are the lowest in the State and considerably less than that fixed by the Missouri statutes.

There are one hundred and twelve factories in Hannibal, besides the great Burlington and other railroad shops, which are factories of a most profitable and desirable character. The employes of these concerns number over four thousand, and are paid in wages annually a sum in excess of three and a half

million dollars. The wonderfully rapid growth in the number of factories in Hannibal, the capital invested in them, the value of the annual output, the number of employes and the annual pay roll was over one hundred per cent during 1902 and 1903, yet the growth has been of a substantial and permanent character, and the year 1904 promises even greater gains, as is indicated by the new buildings and extensions already under way.

The business men of Hannibal, anticipating the growth of manufacturing in the central west, and especially in the cities on the Mississippi river, and further anticipating the rise in value of Hannibal real estate, took advantage of a



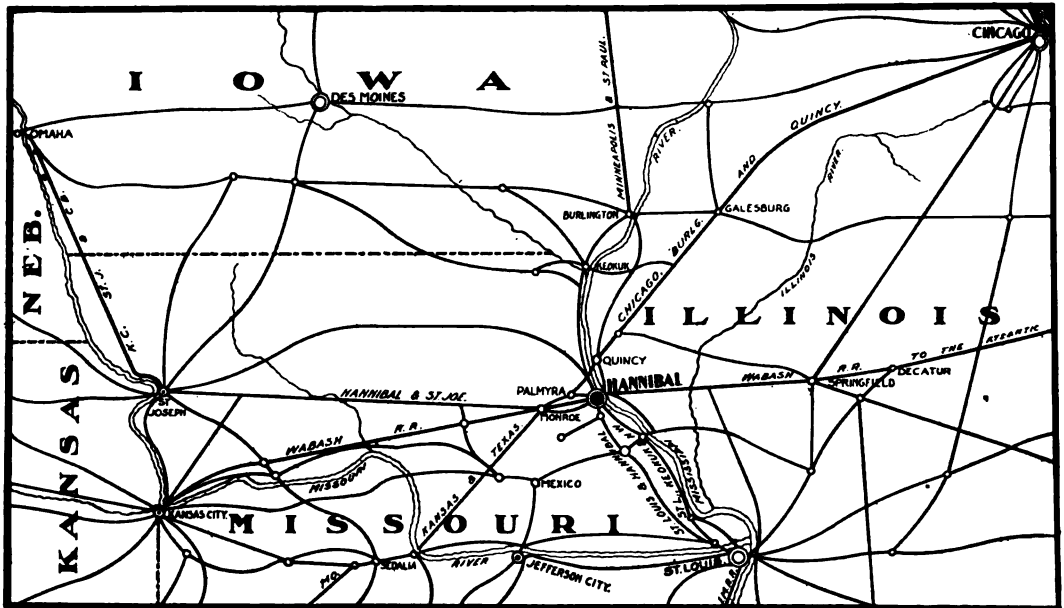
RESIDENCE OF J. J. CRUIKSHANKS.

liberal offer to sell, made by the owners, and purchased a tract of land of 33 acres, situated within six blocks of the Union Station, for the purpose of giving it away as sites for factories desiring to locate in Hannibal. The tract of land has a frontage of 2,000 feet on the main line of the great Burlington railway system, and 4,000 feet on the main line of the Missouri, Kansas and Texas railway, and is accessible to the Wabash and other roads. Splendid switching facilities, in connection with these great railways, can be had. Several large manufacturing plants have recently located on this tract of land and are prospering. The board of directors of the Business Men's Association, holding the title to the land, will be glad to entertain a proposition from any firms or individuals desiring to locate a new factory, or contemplating moving factories now in operation elsewhere, to the city.

Among the notable manufactories of Hannibal are flour, boots and shoes, cigars, lime, and cement. Hannibal has long been famous for the rare quality of its flour. The Roberts, Johnson & Rand Shoe Company, The Bluff City Shoe Company, and the Hannibal Shoe Company sent out last year 1,500,000 pairs of shoes. The first named, with the addition under construction, will be the largest shoe factory in the west outside of St. Louis, having an annual capacity of 2,000,000 pairs of shoes. There are 12 cigar factories, employing 125 men. The Duffey-Trowbridge Stove Foundry manufactures over 53,000 stoves annually, valued at \$350,000; has a yearly pay roll of \$120,000 for 225 men. The larger part of the tonnage of the Burlington railway system is carried on car wheels made by the C. A. Treat Manufacturing Company of Hannibal. The Bear Creek White Lime is of marvelous purity. Three firms have a capacity of 50,000 barrels of lime annually. The city is a wholesale center for lumber. There are three large planing mills. The Atlas Portland Cement Company of Pennsylvania has erected at Hannibal the largest and most complete Portland cement plant in the world, with a capacity of from eight to nine thousand barrels of Portland cement daily, which means that the outgoing freight from this immense industry alone is seventy car loads daily, while the freight received by it, which is mostly coal, will average thirty cars daily. The company employed 1,600 men during 1903 and paid them in wages the sum in excess of \$850,000.

On account of the central location and superior shipping facilities which Hannibal enjoys, the wholesale business in many staple lines has long been profitable, and there are now twenty-one firms doing a wholesale inter-state commerce business. The following lines are represented: Groceries, drugs, paints, oils, furniture, lime and cement, lumber, stationery and blank books, stoves and hardware, produce, cigars, tobacco and liquor. The retail interests of Hannibal are in a flourishing condition. There are now 523 firms doing business in the city; an increase of 53 in two years. Cold storage is a comparatively new venture. A plant recently constructed has a capacity of 50,000 barrels of apples.

The churches, schools, and various public buildings at Hannibal are of the highest order of excellence and efficiency. There are ten well furnished and



MAP SHOWING CENTRAL LOCATION OF HANNIBAL AND ITS SHIPPING FACILITIES.

well equipped public school buildings. The new high school under construction is to be the pride of the city. The Evangelical Lutheran Parochial School, The St. Joseph Academy, Catholic, and Hannibal Commercial College, are doing much for education. Hannibal's Free Public Library was one of the first in the State to be established and maintained from public revenue. The John H. Garth Memorial Library building recently donated to the city, is one of the most complete in the west. All religious denominations are represented by large and aggressive churches or congregations. There are two daily newspapers in Hannibal: the Morning Journal and the Evening Courier-Post. The Standard Printing Company has a large business extending into several States.

Hannibal is particularly rich in fine public buildings. The county court house, which is constructed of unexcelled limestone; Levering Hospital, donated by A. R. Levering, is maintained from public funds; the John H. Garth Memorial Library building is a gem of architecture; the United States Government building was one of the first built in the west. The Park theater is an admirable place of amusement.

There are two commercial clubs in Hannibal, working harmoniously for the promotion of the commercial interests of the city: the Business Men's Association and Merchants' Association. The Country Club is a generous patron of amateur out-door athletics. The Labinnah or "Hannibal Club," is purely social in character, owns a splendid building, and is influential in the city's social affairs.

Hannibal is now an important city of manufacturing and industrial activity, having been made so by those who appreciated her superior advantages. In the immediate future, as the great manufacturing institutions of the east move to the center of population and wealth, which is along the Mississippi river, a movement which is now on, and which will grow in importance in the near future, Hannibal will expand by leaps and bounds as she has never done before. With her natural advantages as a commercial and industrial center, with the spirit of enterprise which permeates and dominates all classes of her citizens, her expansion in the next few years will be on a scale calculated to amaze those who are not familiar with the trend of industrial development in the Mississippi valley, and especially the peculiarly favorable conditions which surround the railway and commercial center called Hannibal.



**J**EFFERSON CITY, the capital of Missouri, also the county seat of Cole county, is situated in the geographical center of the State. It is upon the south bank of the Missouri river, which is here spanned by a bridge. It is a city of 12,000 people (census figures, 9,664) and has a large and growing manufacturing business. Within the city are located the State capitol, the penitentiary, the supreme court. The Missouri Pacific railway has large interests, which contribute directly to the city's importance as a wholesale manufacturing point and indirectly to the retail trade of the town. Manufacturing of shoes is a prominent commercial feature. Ten thousand pairs daily is the combined output of the five factories. Overalls, beer, wine, brick, flour, are made, and one of the largest saddle-tree factories in the world is here located. The Tribune Printing Company gives employment to fifty people and does printing for several States. As the capital city of its State, biennial sessions of the General Assembly are held in Jefferson City. Matters of State and of courts bring a large transient business to the hotels, of which there are several of first class character. A notable feature of the city is its schools and libraries. The high school is one of the best in Missouri, and in connection therewith is a well selected reference library. The law library, maintained at the expense of the State is frequented by lawyers from all over Missouri. It is one of the best of its kind to be found in the United States. Carnegie library has recently been established. It is a city institution with open doors. Lincoln Institute, State school for negroes, has a strong library in connection. There are also several valuable private libraries. Jefferson City is located upon the bluff side of the river. Its main street lies upon the summit of the bluff paralleling the stream. The business streets are nearly all paved with vitrified brick. All the streets have wide asphalt or brick sidewalks, and in the residence portion, large trees line the drives one either side. The city has a thorough system of waterworks, electric lights and gas. Few towns have better system of drainage. There are many fine homes. The newspapers of Jefferson City are: Missouri State Tribune, Cole County Democrat, Jefferson City Press, Missouri Volksfreund, Republican, Jefferson City Post and Missouri School Journal. There are five banks with \$3,000,000 in deposits. The federal government has constructed a handsome building for postoffice and courts.

An act of Congress, passed March 6, 1820, authorized the organization of Missouri as a State and made a grant of four undesignated sections of public land as a capital site. The first State legislature, elected in anticipation of the admission of Missouri to the Union, convened in St. Louis on September 20,

*Photo in heading: State Capitol.*



and appointed as commissioners to make the capital location, John Thornton, of Howard county; Robert G. Watson, of New Madrid; John G. White, of Pike county; James Logan, of Wayne county and Jesse B. Boone, of Montgomery county; the latter named died soon afterward and was succeeded by Daniel M. Boone, of Gasconade. The commissioners met in May, 1821, at Cote Sans Dessein (now Barkersville), Callaway county, which place contested with the new town of Marion, in Cole county, for the location. The rival claims were disregarded and the present site was chosen. St. Charles was the seat of the State government until the completion of the State House at Jefferson City in 1826. This building was erected by Daniel Colgan at a contract price of \$25,000. It was rectangular, of brick, two stories high, without ornamentation and stood on the site of the present executive mansion. It was burned in 1837 and a new edifice was begun the same year and completed in 1842 at a cost of \$350,000. Much of the stone used in its construction was taken from the bluffs overlooking the river and the massive pillars were from the Callaway county quarries. In 1887-8 it was enlarged and made practically a new building at a cost of \$250,000. It has a frontage of 310 feet and varies in width from 80 to 110 feet, the least of these dimensions being of the old central portion and the greater that of the newly added wings. The center sustains a dome of 130 feet above the roof. Other State buildings are the executive mansion, erected in 1872, at a cost of \$75,000; the supreme court building; the armory; the penitentiary, affording room for 2,500 convicts. This institution is self-supporting and is noted for its excellent discipline. At various times the question of capital removal has been agitated, and in 1896, the legislature submitted to the people an amendment to the constitution, providing for the establishment of the seat of government at Sedalia. At the election in November, 1896, however, the proposition was defeated by a vote of 334,819 against it to 181,258 in its favor.

The municipal history of Jefferson City begins four years later than its designation as the seat of State government. It was incorporated November 7, 1825, its territory being defined identically with that of the government site. This organization was not made effective and later in the same month, it was incorporated as the town of Jefferson City with Elias Bancroft, Samuel L. Hart, Thomas Miller, Reuben Garrett and Henry Shields, as trustees. In 1839 a city organization was effected with Thomas L. Price as the first mayor.

The Cole county courthouse is of handsome architecture, built of Jefferson City limestone for foundations and Carthage stone walls. It is 78 by 118 feet in size and its dome is 137 feet above the street level. The city hall was the gift of Major J. M. Clark. St. Peter's School (Catholic) has a substantial building. The German Evangelical and German Lutheran schools each have fine buildings.

Jefferson City was named for the great statesman, then living, who wrote the Declaration of Independence and acquired the Louisiana territory for the United States. It is 125 miles west of St. Louis, stands 123 feet above high water mark of the Missouri river, in most picturesque situation with a splendid view of the stream and the country beyond.





**C**ARTHAGE, the county seat of Jasper county, with its surpassing natural attractiveness, handsome residences, stately business blocks, shady avenues, magnificent court house, pretty lawns, and enchanting park, is the most beautiful city of its size in America.

Its population in 1890 was 7,981; in 1900, 9,416. It now has 12,000 inhabitants, and is the seventh city in Missouri in population. The climate is particularly delightful. The death rate is 8.61 per cent, the lowest of any city in the United States. The exceptional healthfulness is due to the high altitude of Carthage, its clear atmosphere, fine natural drainage, perfect sewerage, pure water, and rigid enforcement of sanitary laws. It is located on a woodland eminence in the geographic center of Jasper county, and is 150 miles south of Kansas City and 300 miles southwest of St. Louis. It is 1,200 feet above the level of the sea.

Carthage is in the heart of the great lead and zinc district of southwest Missouri, and the growth and prosperity of the city are due largely to the mining development of the district. The richest deposits of mineral and some of the best producing mines in the district are at Carthage. Near Carthage are twenty producing mines, employing 300 men.

In the production of apples, peaches, and pears, the Carthage district is equal to any in the Ozark uplift, while in the production of berries, it is without a peer.

Carthage is an important railway center. It has the Missouri Pacific, St. Louis and San Francisco, Carthage and Western, and the White River branch of the St. Louis, Iron Mountain and Southern. These lines afford quick freight and passenger traffic with Kansas City, St. Louis, and other points north and east and open to Carthage merchants and manufacturers markets in Kansas, Arkansas, Oklahoma, and the Indian Territory. The Frisco system operates an inter-urban passenger service between Carthage and other cities of the southwest Missouri mining district. The White River railroad is a direct route from Carthage to Memphis, Tennessee. The division of this road is located in Carthage. Hundreds of railway employes make Carthage their home and the vast amount of money they receive each month contributes to the prosperity of the city. Carthage is the eastern terminus of the Southwest Missouri Electric Railway. This cheap and rapid transit system brings the people of the southwest mining district into close commercial relationship.

The chief product of Carthage is building stone. It is a crystalline white limestone of superior durability and matchless beauty. For building purposes, either rough or dressed, it has no equal, and it is specially adapted for trim-

*Photo in heading: Jasper County Courthouse.*

mings, pavements, and monuments. Seven companies are engaged in quarrying and finishing Carthage stone, employing 300 men, with a monthly pay roll of \$15,000.

Carthage has well-paved, well-kept streets. Its sidewalks are of brick and sawed stone. The municipality owns and operates an electric plant which lights the streets of the city and furnishes light to private consumers. A private corporation manufactures gas. Carthage has a complete and perfect sewer system and a thoroughly equipped, paid fire department. It receives its water supply from Spring river, a never-falling, crystal stream flowing by the city. The water is freed from all impurities by perfect filtration.



CARTHAGE  
RESIDENCES.



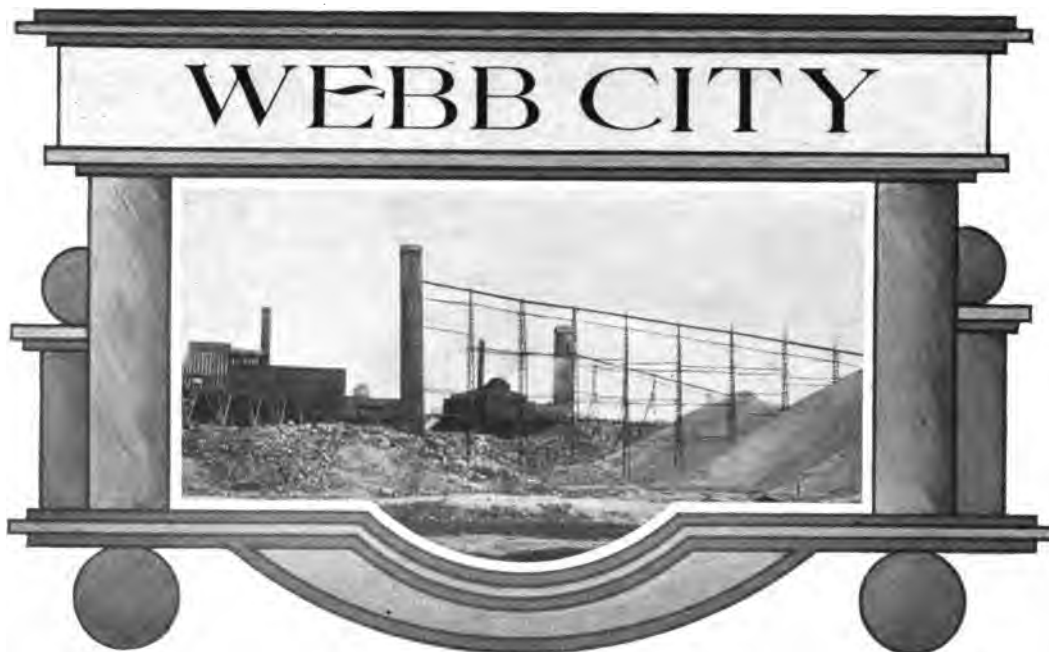
In the center of the public square of Carthage is the Jasper county court house, of Carthage stone, and costing \$100,000. In architectural symmetry and stately beauty it has few equals. Central Park, a ten-acre tract in the heart of the city, and Chautauqua Park, Carter's Park, and the Carthage Driving Park, picturesque woodlands embellished by art, in the suburbs of Carthage, are delightful places for recreation.

Carthage has a \$15,000 modern hospital, a monument to the untiring efforts of the Faithful (Carthage) Circle of the King's Daughters; a \$25,000 public library, the gift of Andrew Carnegie; two daily newspapers, the Morning Democrat, democratic, and the Evening Press, republican.

Carthage has four mills with a daily capacity of 1,200 barrels; ice and cold storage plant; factories, machine shops and wagon, furniture, canning, mattress, bedsprings, and other factories. Twenty-two church buildings are in Carthage. The city maintains five ward schools; a central school, a high school, and a school for colored children. It is now erecting a \$75,000 high school building. The Carthage Institute, under Presbyterian control, with building and grounds valued at \$40,000, does collegiate work. The city also has a prosperous commercial college and a conservatory of music. In Carthage exists the pioneer American Civic Improvement Association. The Carthage Chautauqua is a permanent and successful institution. The Carthage Commercial Club is a strong and potent commercial organization.

The Carthage lodge of the Benevolent and Protective Order of Elks has a club house costing \$20,000. Neither intoxicating drinks or games of chance are allowed on the premises. Free use of the buildings is granted the Commercial Club for meeting, and the Woman's Club for receptions.

Few cities in America offer so many advantages for home building as the beautiful, progressive, hospitable city of Carthage.



**W**EBB CITY lies in the center of a fertile agricultural district in the midst of the Missouri-Kansas zinc and lead fields. Two main trunk lines, the Missouri Pacific, and the San Francisco systems enter the city, which, at the present time, is the most important freight center on these two systems in the entire State, with the exception of St. Louis and Kansas City, more freight being handled by these railroads at this point than at any other city in the State with the exceptions mentioned.

Webb City has fine educational facilities. In addition to good public schools, the Great Western Business and Normal School is located here. This institution is one of ten of its kind in the United States. The public road system of Webb City is unexcelled. Webb City has the largest and most complete retail establishment in the State south of Kansas City and St. Louis. There are twelve church edifices within the city limits. The city is modern; well lighted with electricity, has excellent water and sewerage system and efficient fire department. It is headquarters of the Southwestern Missouri Electric Railway, which has a plant valued at \$300,000, and a local salary list of more than \$125,000. Immense deposits of white limestone of excellent quality for building are found within the city limits. Two banks with total deposits of more than \$750,000 afford banking facilities. There are two daily newspapers in Webb City, the Sentinel and the Register. The city is a fine field for factories and other business investments.

The Webb City and Cartersville mining districts' sales during the last ten years have amounted to \$23,000,000. The miners are Americans (recruited from the farms, the offices and the colleges), a foreigner being almost unknown in the zinc fields; and, as the "miner" of to-day may be the "operator" of to-morrow, miners' unions are not found here. The zinc and lead ores being found at such shallow depths (from ten to two hundred feet) this district has long been known as the "poor man's mining country." The oldest mining company, the Center Creek Mining Company, has mined and sold zinc and lead ore to the value of almost \$7,000,000 since it began operation, from less than 100 hundred acres of land. The life of mining in this district is not limited to a few years, as the history of the production amply shows. The companies which have been for years in existence are still among the largest producers, and promise to continue so for years to come.

*Photo in heading: Webb City Mining Scene.*



POWERHOUSE AT LAKESIDE—SOUTHWEST MISSOURI  
ELECTRIC RAILWAY.

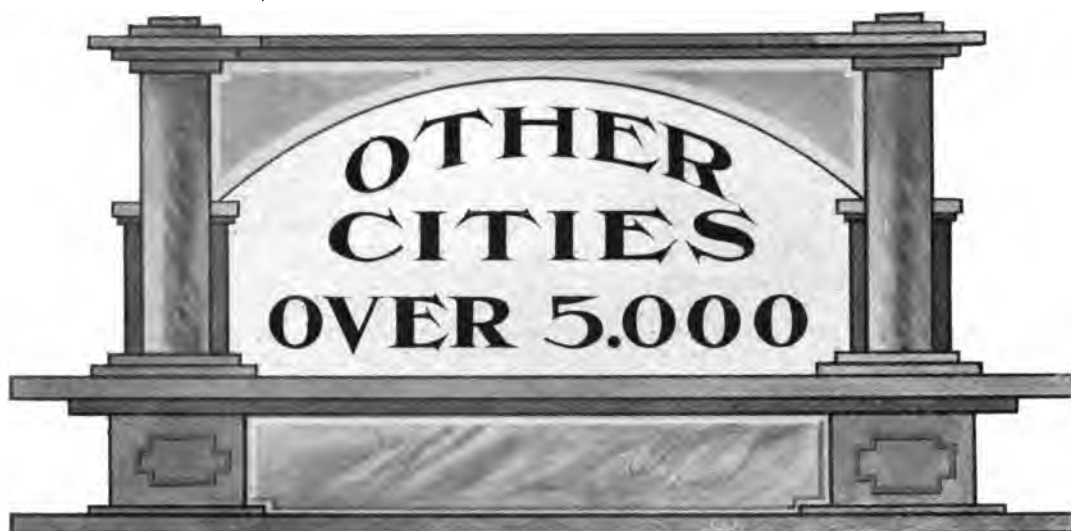
Webb City is in Jasper county, 165 miles south of Kansas City and 318 miles southwest of St. Louis. It immediately adjoins Cartersville; attempts have been made to consolidate the two cities but without success. Its water mains, completed in 1890, at a cost of \$120,000, take water from Center creek, two miles north

of the city. The city officials are in the city hall, a commodious two-story building. The high school is articulated with the State University. The Commercial Club is an active and influential organization.

The plat of the city was recorded September 11, 1875, by John C. Webb, owner of the land upon which it was located. Numerous additions were made and the town was incorporated December 8, 1876, as a city of the fourth class; the first permanent organization was effected December 15, following. In April, 1890, it became a city of the third class with Thomas J. Herrington as the first mayor. In 1873 John C. Webb discovered lead while plowing on the site of the present city and in 1877 systematic mining was begun.



WEBB CITY BUSINESS BLOCK.



**M**OBERLY (population 8,012), county seat of Randolph county, is a busy railroad center. The Missouri, Kansas & Texas, and the Wabash railroads intersect here. The main shops of the Wabash west of the Mississippi are located in Moberly. Randolph is the leading coal county. In Moberly are large manufactories of paving and building brick.

St. Charles (population, 7,982), county seat of St. Charles county, is twenty-three miles west of St. Louis, on the Wabash and the Missouri, Kansas & Texas railways, and on the Missouri river, which is here crossed by two bridges. Here are extensive car and bridge works, manufactories of car materials and tobacco. Lindenwood College (for women), Sacred Heart Convent and St. Charles College are located here.

Nevada (population, 7,461), county seat of Vernon county, 107 miles south of Kansas City, is located on the Missouri, Kansas and Texas and the Missouri Pacific railroads. It is surrounded by fine agricultural country. Mining in vicinity and State Hospital for the Insane is here.

Independence (population, 6,373), county seat of Jackson county, is ten miles east of Kansas City, with which city it is connected by the electric railway and the main lines of the Chicago & Alton, and Missouri Pacific railroads. It is a beautiful residence city, has extensive business interests and is surrounded by a fertile and highly improved country.

Chillicothe (population, 6,905), county seat of Livingston county, 95 miles northeast of Kansas City, is an important railroad center. It is on the Chicago, Milwaukee & St. Paul, Hannibal & St. Joseph, and Wabash railroads. The surrounding county is a fine stock and general farming region. The State Industrial School for Girls is located here.

Aurora (population, 1900, 6,191), is a thriving city in Lawrence county, in the southwest, on the St. Louis & San Francisco railroad. It has large and growing business interests. The locality is favorable to fruit. Important lead and zinc mines are in the vicinity.

Kirkville (population, 5,966), county seat of Adair county, is on the Wabash and Quincy, Omaha & Kansas City railroads. It has manufactories of wagons, buggies, and handles, is situated in a fertile grain and fruit section. Productive coal mines in vicinity. The State Normal School is located here.

Cartersville, incorporated as a city in 1882, lies in the richest lead and zinc mining district in the world. It is a modern progressive city of nearly 6,000 inhabitants, with property of an assessed valuation of \$2,145,000. It is on the Frisco line, Missouri Pacific railway, and the Granby Extension, and the Southwest Missouri Electric Street railway. It has fine schools, modern churches, a

a bank with a capital of \$50,000; representative business houses, electric lights, waterworks, and electric street railway, and two telephone systems. The Cartersville special road district, comprising six miles square, maintains well graded and macadamized roads leading into the city from every direction. The Cartersville lead and zinc mining district embraces about five miles square, and has produced more ore per square mile than any like territory in the world. In the Cartersville district there are 66 thoroughly equipped steam concentrating mills, each employing an average of twenty-five men, besides numerous hand-jig operators and prospecting outfits.

Columbia (population, 5,651), county seat of Boone county, in center of State, on spurs of Wabash and Missouri, Kansas & Texas railroads. It is center of fine stock, orchard and general agricultural section. Its interests are chiefly educational. The State University, two large female colleges, the Missouri Bible College, and two academies are located here.

De Soto (population, 5,611), is in Jefferson county, 43 miles south of St. Louis, on the St. Louis, Iron Mountain & Southern railroad, which has its main repair shops here. Manufactories of flour and agricultural implements are located here.

Brookfield (population, 5,484), on the Hannibal & St. Joseph railroad, in Linn county. This railroad has its repair shops here. There are also important factories. In the neighborhood are large coal mines, and the region is excellent agriculturally.

Trenton (population, 5,396), county seat of Grundy county, 98 miles northeast of Kansas City, on the Chicago, Rock Island & Pacific, and Quincy, Omaha & Kansas City railroads, has leading interests, mercantile and manufacturing. Here are railroad repair shops.

Louisiana (population, 5,131), in Pike county, 94 miles northwest of St. Louis, on the Chicago & Alton (which crosses the Mississippi river on a bridge here), the Chicago, Burlington & Quincy, and the St. Louis, Keokuk & Northwestern. Leading manufactories are tobacco, sash, doors, lumber, lime, stone quarries. Extensive nurseries and one of the largest cement plants in the United States are here.

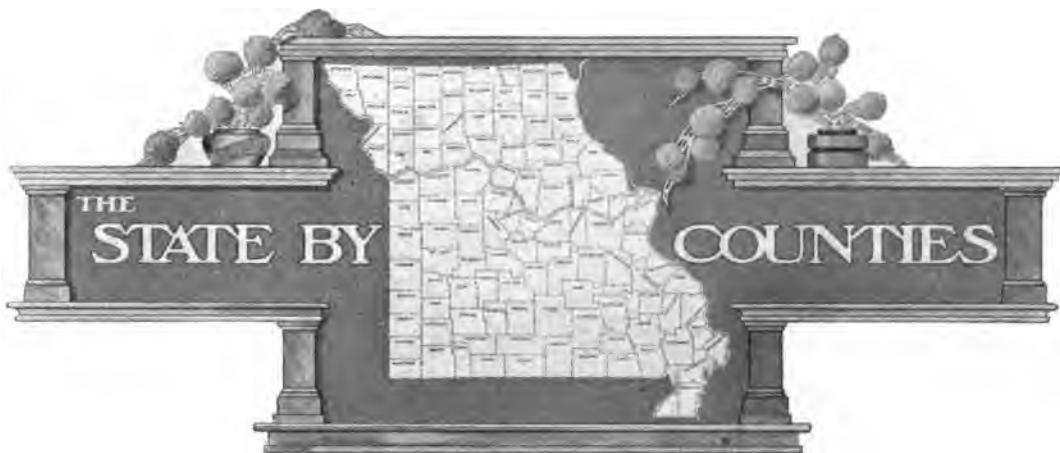
Mexico (population, 5,099), county seat of Audrain county, on the Chicago & Alton and Wabash railroads, is an important business center; has a large trade in fine horses and cattle. Manufacture of fire brick, stove linings, carriages, and flour. Hardin College for young women, and Missouri Military Academy, for young men, are located here.

Marshall (population, 5,086) county seat of Saline county, on the Chicago & Alton and Missouri Pacific railroads, is in the center of an extremely rich and well improved agricultural section. The Missouri Colony for the Feeble Minded and the Missouri Valley College (under the control of the Cumberland Presbyterians) are located here.

Clinton (population, 5,061), county seat of Henry county, 87 miles southeast of Kansas City, on the Missouri, Kansas and Texas, St. Louis & San Francisco, and Kansas City, Clinton & Springfield railroads, has thriving business interests, especially flouring mills. Coal is produced in vicinity and agriculture is a leading industry. Baird College, for young women, is here.



RESIDENCE W. A. DAUGHERTY, CARTERSVILLE.



**T**HE State of Missouri is divided into 114 counties and the city of St. Louis, which city is counted for purposes of administration as a county.

The statistics on the following pages refer, in text as in table, to the total 1902 products of the county and to the aggregate number and value of the county's live stock. Where the text makes these figures refer only to exports instead of total products and value it is incorrect. The tables were prepared by Hon. G. B. Ellis, Secretary of the State Board of Agriculture.

COUNTY,COUNTY SEAT	AREA	POP.	COUNTY,COUNTY SEAT	AREA	POP.	COUNTY,COUNTY SEAT	AREA	POP.
Adair, Kirksville	561	21,728	Grundy, Trenton	432	17,832	Pemiscot, Caruthersville	509	12,115
Andrew, Savannah	420	17,332	Harrison, Bethany	730	24,898	Perry, Perryville	468	15,134
Atchison, Rockport	532	16,501	Henry, Clinton	740	28,055	Pettis, Sedalia	685	32,438
Audrain, Mexico	680	21,160	Hickory, Hermitage	408	9,985	Phelps, Rolla	677	14,194
Barry, Cassville	790	25,532	Holt, Oregon	460	17,083	Pike, Bowling Green	620	25,744
Barton, Lamar	590	18,253	Howard, Fayette	450	18,337	Platte, Platte City	410	16,193
Bates, Butler	874	30,141	Howell, West Plain	907	1,834	Polk, Bolivar	633	23,255
Benton, Warsaw	820	16,556	Iron, Graniteville	555	8,716	Pulaski, Waynesville	532	10,394
Bollinger, Marble Hill	610	14,650	Jackson, Independence	607	195,193	Putnam, Unionville	518	16,688
Boone, Columbia	680	28,642	Jasper, Carthage	632	84,018	Ralls, New London	480	12,287
Buchanan, St. Joseph	417	121,838	Jefferson, Hillsboro	687	25,712	Randolph, Huntsville	489	24,442
Butler, Poplar Bluff	702	16,759	Johnson, Warrensburg	835	27,843	Ray, Richmond	561	24,805
Caldwell, Kingston	426	16,656	Knox, Edina	504	13,479	Reynolds, Centerville	830	8,161
Callaway, Fulton	830	25,984	Laclede, Lebanon	729	16,523	Ripley, Doniphan	623	13,186
Camden, Linnecreek	702	13,113	Lafayette, Lexington	604	31,679	St. Charles, (same)	456	44,474
Cape Girardeau, (same)	570	24,315	Lawrence, Mt. Vernon	612	31,662	St. Clair, Osceola	705	17,907
Carroll, Carrollton	686	26,455	Lewis, Monticello	500	16,724	Ste. Genevieve, (same)	493	10,359
Carter, Van Buren	506	6,706	Lincoln, Troy	613	18,352	St. Francois, Farmington	460	24,051
Cass, Harrisonville	712	23,636	Linn, Linneus	620	25,503	St. Louis, Clayton	483	50,040
Cedar, Stockton	491	16,923	Livingston, Chillicothe	532	22,302	St. Louis city	61	555,238
Chariton, Keytesville	740	26,826	McDonald, Pineville	523	13,574	Saline, Marshall	820	33,703
Christian, Ozark	551	16,939	Macon, (same)	828	43,018	Schuyler, Lancaster	302	10,840
Clark, Kahoka	404	15,383	Madison, Fredericktown	495	9,975	Scotland, Memphis	453	13,232
Clay, Liberty	407	18,903	Maries, Vienna	530	9,616	Scott, Benton	416	13,092
Clinton, Plattsburg	417	17,362	Marion, Palmyra	432	26,331	Shannon, Eminence	993	11,247
Cole, Jefferson City	390	20,578	Mercer, Princeton	451	14,706	Shelby, Shelbyville	509	16,167
Cooper, Boonville	562	22,532	Miller, Tuscumbia	597	15,187	Stoddard, Bloomfield	833	24,669
Crawford, Steelville	747	12,959	Mississippi, Charleston	417	11,837	Stone, Galena	509	9,892
Dade, Greenfield	493	18,125	Moniteau, California	410	15,931	Sullivan, Milan	648	20,282
Dallas, Buffalo	530	13,903	Monroe, Paris	666	19,716	Taney, Forsythe	648	10,127
Davies, Gallatin	531	21,325	Montgomery, Danville	514	16,571	Texas, Houston	1157	19,192
DeKalb, Mayville	420	14,418	Morgan, Versailles	612	12,175	Vernon, Nevada	839	31,619
Dent, Salem	768	12,986	New Madrid, (same)	654	11,280	Warren, Warrenton	410	9,919
Douglas, Ava	809	16,802	Newton, Neosho	629	27,001	Washington, Potosi	744	14,263
Dunklin, Kennett	531	21,706	Nodaway, Maryville	864	32,938	Wayne, Greenville	770	15,309
Franklin, Union	880	30,581	Oregon, Alton	787	13,906	Webster, Marshfield	579	16,640
Gasconade, Hermann	518	12,298	Osage, Linn	606	14,096	Worth, Grant City	264	9,832
Gentry, Albany	492	20,554	Ozark, Gainesville	747	12,145	Wright, Hartville	673	17,519
Greene, Springfield	668	52,713						



# ADAIR



**T**HE county of Adair is distinguished for the Missouri State Normal School; Dr. Still's American School of Osteopathy; live stock; coal. It lies twenty miles south of Iowa and forty miles west of the Mississippi river. First District Normal School was founded at Kirksville in 1870. Purpose: to fit teachers for public schools. Academic course offers five years each in English Language and Literature; Latin, Mathematics; four years in Ancient, Mediaeval, Modern, English, and American History, and in German Language and Literature; two years in Biology; one year each in Physical Geography, Agriculture, Experimental Inorganic Chemistry, Experimental Organic Chemistry, General Inorganic Chemistry, Experimental Physics and General Descriptive Physics. Average attendance, 750. Twelve thousand volumes have recently been added to the well-equipped, modern library. Manual Training, Shop Work and Drawing, Art, Music and Physical Culture, School Management, Pedagogics and History, and Philosophy of Education supplement academic work. Twenty-six teachers. Osteopathy had its birth in the American School of Osteopathy, established 1892, which now has 1,651 graduates, in every State, Canada, Honolulu, Japan, Australia, and New Zealand. Enrollment averages 575; average patients at hospital, 400. Cattle lead in total value; corn, horses and mules, hay and hogs next in order. Coal output, 312,403 tons.

ADAIR COUNTY'S 1902 CROP			
	ACRES	PRODUCT	VALUE
Corn	76,645	2,906,080 *	\$ 886,355
Wheat	2,190	47,085 *	28,250
Oats	4,733	160,922 *	41,290
Hay	59,110	82,755 †	455,155
Forage	7,535	8,350 †	41,750
Broom Corn	21	15,300 ‡	495
Grass Seed		6,417 *	8,985
Tobacco	24	15,640 ‡	1,565
Potatoes	929	139,350 *	34,840
Vegetables	840		35,860
Total			\$ 1,532,085
LIVE STOCK AND PRODUCTS			
KIND	NUMBER		VALUE
Cattle	36,539		\$ 1,105,455
Horses	11,713		780,865
Mules	1,321		79,440
Asses and Jennets	101		9,360
Sheep	6,261		18,785
Swine	36,351		363,510
Chickens	143,772		
Turkeys	5,187		108,415
Geese	3,650		
Ducks	2,995		
Swarms of Bees	2,465		7,395
Honey	75,850 ‡		9,170
Wool	25,224 ‡		4,040
Milk	2,431,068 ‡		177,216
Butter	485,494 ‡		
Eggs	761,330 ‡		95,165
Total			\$ 2,762,826

\* Bushels. ‡ Pounds. ‡ Dozen.  
† Tons. § Gallons.

the southwest, to the west line of the county. Scattering tracts of the roughest land are here found at \$15 an acre. The average price per acre of the west half is \$40. Photos in heading: Courthouse; Normal School No. 2, Kirksville.

Farms are not as well improved as in the east half. The east portion is prairie, gently rolling, uniform in productive value. Ordinarily land sells at \$30 to \$50. Within four miles of Kirksville \$50 is the average until within a mile of town, where prices reach \$80 to \$100.

**MINERALS:**—There are three veins of coal, ranging in depth from surface to 175 feet, and in thickness from thirty-six to forty-three inches. Active mines are at Novinger, Danforth, Connellsville, Fegley, Stahl and Castle. Men employed, winter, 1,038; summer, 788. Limestone is found along the Chariton. Fire clay underlies coal in veins of four feet.

**MANUFACTORIES:**—Wagon factory, handle factory, hay-stacker factory, two cigar factories, and two flouring mills at Kirksville; flouring mills at Stahl and Gibbs; grist mill at Brashear.

**DAIRYING:**—Patterson's Dairy, eight miles east of Kirksville, has 100 cows. This industry is rapidly increasing among farmers. Butter brings 17 to 25 cents per pound.

**TRANSPORTATION:**—Direct railroads to St. Joseph, Kansas City, St. Louis. Mileage within the county: Wabash, 23.73; Quincy, Omaha & Kansas City, 31.94; Santa Fe, 10.28; Iowa & St. Louis, 23. County makes special appropriations for dirt road improvement; this is largely supplemented by private subscription.

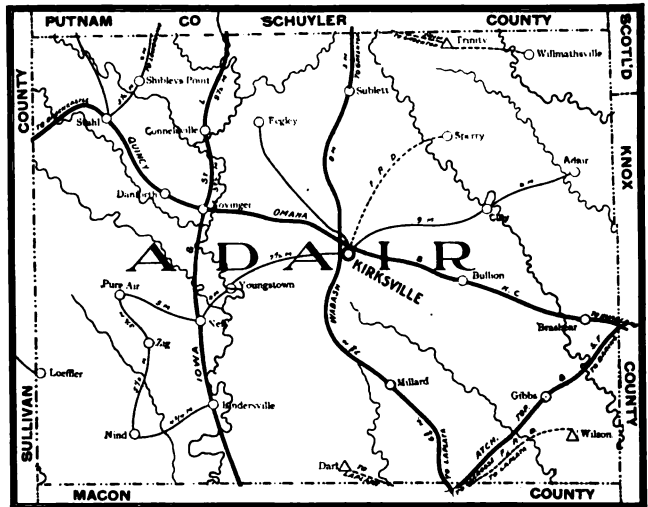
**SCHOOLS:**—State Normal School, American School of Osteopathy, Kirksville Business College, Kirksville High School, and four ward schools, at Kirksville, approved by the University of Missouri.

**TOWNS:**—Kirksville, county seat, has electric lights, waterworks, sewerage, telephone connections with surrounding country. Supported by schools and farming. Western county towns, Novinger, Danforth, Stahl, are mining places. Brashear, Gibbs, Millard, Bullion are farming centers.

**LIVESTOCK:**—Fine blooded Shorthorn, Hereford, Polled-Angus, and Galloway cattle; all kinds of horses; Berkshire, Poland-China, and Jersey hogs; Cotswold and Merino sheep are raised.

**POPULATION AND FINANCE:**—White, 21,412; colored, 316; American born, 21,233; foreign born, 495; total, 21,728. Farm homes owned, 1,887; rented, 762; town homes owned, 1,026; rented, 1,004; total, 4,679. County tax, 50 cents; school tax: from 10 cents to \$1.30; average, 41; total assessed valuation, \$5,550,000; assessed valuation per cent of actual valuation, 40 per cent. No county nor township debt.

**NEWSPAPERS:**—Kirksville Democrat, Express, Journal, Graphic, Theocrat, Journal of Osteopathy; Brashear News.



# ANDREW



**V**ARIETY in agricultural and horticultural production and situation with reference to markets, are the leavening of Andrew county. The first gives account for its vanguard position in corn, vegetables, fruit and live stock. Proximity to wholesale and retail markets makes its towns desirable factory locations and encourages fancy farm production. Savannah, county seat, is twelve miles north of St. Joseph. County embraces 420 square miles, 268,800 acres of land surface, of which 222,664 acres are in high state of cultivation. Number of farms, 2,562; average size, 104.5 acres; of total valuation, \$9,584,235. Corn production exceeds one and a

third million dollars a year, and cattle value is in slight ascendancy to this. Hogs amount in value to almost a million dollars. Horses and mules, and dairy products are considerable.

**POPULATION:**—White, 17,112; colored, 220; American born, 16,575; foreign born, 757; total, 17,332. Farm homes owned, 1,750; rented, 762; other homes owned, 720; rented, 528; total families, 3,760.

**FINANCE:**—County tax, 53 cents; school tax, 56 cents; total assessed valuation, \$7,318,123; assessed valuation per cent of actual valuation, 25; no county debt; no township debt.

**TIMBER:**—One-half of the surface was primevally timbered with black oak, white oak, walnut, cottonwood, elm and hickory. Five-sixths of this one-half has been cleared. Portable saw mills furnish hardwood lumber at \$16 to \$20 per thousand. Cordwood, \$4 to \$4.50.

**MINERALS:**—Limestone for foundation purposes is found two and one-half miles northeast of Savannah.

**LAND:**—Twenty per cent of the land is bottom, adjoining the Nodaway, One Hundred and Two, and Platte rivers, which flow southwardly through the county, the first forming the western border until it empties into the Missouri; and along the Missouri river west of the bluff which is marked by Kansas City, St. Joseph & Council Bluffs railroad. Bottom along the

Missouri river overflows once in six or eight years, and may be had for \$40 an acre. High bottom land, which almost wholly includes that along the small streams, will average \$70 an acre. One-third of it sells at \$50, and the remaining

*Photos in heading: Farm Scene on Missouri River; Stove, Product of Savannah Factory.*

ANDREW COUNTY'S 1902 CROP			
	ACRES	PRODUCT	VALUE
Corn	97,242	4,375,890 *	\$ 1,878,405
Wheat	5,400	110,700 *	63,650
Oats	7,864	216,180 *	56,200
Hay	25,830	38,745 †	193,725
Forage	4,640	6,185 †	30,925
Flax	1½	15 *	15
Clover Seed		725 *	3,990
Grass Seed		2,800 *	4,340
Tobacco	5	4,500 ‡	450
Potatoes	1,978	296,700 ‡	71,210
Vegetables	1,285		52,150
<b>Total</b>			<b>\$ 1,855,060</b>
LIVE STOCK AND PRODUCTS			
Cattle	42,889		\$ 1,393,890
Horses	11,168		744,535
Mules	2,244		168,300
Asses and Jennets	104		10,400
Sheep	4,784		15,947
Swine	79,308		793,080
Chickens	152,062		
Turkeys	3,364		139,405
Geese	2,877		
Ducks	1,925		
Swarms of Bees	3,135		8,545
Honey	104,500 ‡		13,085
Wool	22,760 ‡		3,795
Milk	3,309,558 ‡		229,005
Butter	602,432 ‡		
Eggs	967,560 ‡		120,945
<b>Total</b>			<b>\$ 8,640,912</b>

\* Bushels. † Pounds. ‡ Dozen.  
† Tons. \$ Gallons.

one-sixth at \$100. Soil is three to six feet deep, black loam of varying atomic weights. Drawing a line east and west three miles north of Savannah, strips of land north and south trend, measuring east and west, a total of twenty-two miles, are high rolling prairie, strips being divided by the three rivers and their branches, which are centers of bottom strips lined with bluffs. Farms on these strips are finely improved, and level portions bring \$95 an acre. One-half of this land may be bought at \$65 an acre; one-fourth of it at \$50. Soil is black prairie loam, two or three feet deep. On the roughest, along the rivers, soil thins from eight to fourteen inches through erosion. South of the dividing line and west of One Hundred and Two river, the land is of a bluffy nature, but sells on an average with the balance. It is finely improved. Farms are smaller than elsewhere, and a great deal of fruit is raised for St. Joseph and Kansas City fresh and cold storage markets. In proof of its superior producing value, this section, in hand of our Kentucky forefathers, was once practically one large field of hemp. East of One Hundred and Two river the surface is more even. Land sells at a price equal with the balance. Soil is more shallow, but proximity to St. Joseph makes up therefor.

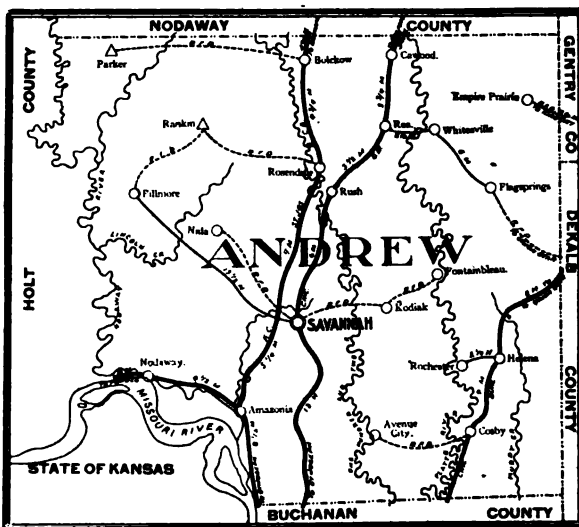
**MANUFACTURES:**—Stoves, farm harrows, wagons, canning factory products, flour, cigars, and brick are manufactured. Howard Stove and Manufacturing Company, at Savannah, established three years, manufactures a smoke consuming heater. Seventy-five men are employed. St. Joseph freight rating is had. Roller mills are located at Savannah, Bolckow, Whitesville, Rosendale. Bolckow has a tile plant, and Flag Springs a distillery.

**TRANSPORTATION:**—Three lines into St. Joseph and Kansas City. Miles of roadbed taxed: Chicago & Great Western, 23; Kansas City, St. Joseph & Council Bluffs, 18.44; Chicago, Burlington & Quincy, 12.

**SCHOOLS:**—High school at Savannah, is upheld by graded school system. New \$30,000 modern building erected this year.

**TOWNS:**—Savannah, electric lights, waterworks, \$85,000 court house; churches costing from \$12,000 to \$18,000; twenty-two acre park; two railroads to St. Joseph. Bolckow, tile factory; Rosendale, Whitesville, Fillmore, Rea, and Amazonia, all farming centers.

**NEWSPAPERS:**—Savannah Democrat, Reporter, Republican; Rosendale Signal; Whitesville Banner; Fillmore Lever.



ANDREW COUNTY APIARY.



**A**TCHISON is the extreme northwestern county. It is a leader in agriculture and stock raising. It is the land of big barns and bulging granaries, and large, sleek herds; of fine homes both in country and town; of good schools and churches. The county area is 560 square miles, or 358,400 acres, of which 302,117 acres are included in improved farms. There are 2,149 farms, of an average size of 156.6 acres, and an estimated actual value of \$14,572,275.

**TIMBER:**—Timber amounting to one-eighth of the county area originally grew upon the Missouri river bluffs and in thin strips along the other streams. This timber has been removed, but owing to artificial culture of groves, the timber acreage is as great as primevally. Then it was walnut; red, white and black oak; crab apple, elm, maple, cottonwood, wild cherry. Now it is maple and elm and walnut.

**MINERALS:**—A sandbank near Rockport supplies local trade. Coal has been found near Fairfax. The Missouri river bluffs are not generally outcropping with stone, but are clay surfaced and even.

**LAND:**—Almost one-third of Atchison county is Missouri river bottom land. This soil is alluvial to endless depth, adapted to corn, wheat, oats, rye; to any and all vegetables and cereals. The bulk of these level-lying farms are available at \$45 to \$55 per acre; one-fifth, second bottoms, bordering the boundary hills, \$80; a less amount, subject to overflow, \$30. Rounding the bottoms is a strip of loess knob lands, varying in width from one to two miles. These hills sometimes rise from all sides at a sixty degree angle—veritable mountain peaks in miniature—to 150 or 250 feet above the adjacent land. This character of land is porous to great depth and is, therefore, especially adapted to fruit tree growth. Little improved, it can now be had at from \$20 to \$30 per acre. Still eastwardly the hills recede to billowy prairie, broken only occasionally by small streams of a southward flow. One-half of the prairie farms bring \$75; three-tenths can be bought at \$60; and one-fifth, in proximity to Tarkio and Rockport, are worth \$100. There are numerous \$5,000 farm residences, and several have been erected at a cost of \$10,000. Corn is the staple product. The most extensive farmer in Missouri lives at Tarkio, in Atchison county. He owns 35,000 acres of high prairie land. Last year this farmer grew more bushels of corn than did seven American States.

ATCHISON COUNTY'S 1902 CROP			
	ACRES	PRODUCT	VALUE
Corn	184,100	8,284,500 *	\$ 2,609,630
Wheat	9,517	199,860 *	114,980
Oats	21,559	538,835 *	140,100
Hay	15,456	30,910 †	170,005
Forage	2,425	3,235 †	16,175
Broom Corn	1	550 †	15
Clover Seed		900 *	1,100
Grass Seed		2,575 *	3,990
Tobacco	3	2,700 †	270
Potatoes	1,033	164,950 *	37,190
Vegetables	640		30,705
<b>Total</b>			<b>\$ 3,124,175</b>

LIVE STOCK AND PRODUCTS		
KIND	NUMBER	VALUE
Cattle	52,945	\$ 1,701,210
Horses	11,760	784,000
Mules	3,737	281,775
Asses and Jennets	92	9,300
Sheep	3,625	12,085
Swine	119,960	1,199,600
Chickens	131,896	
Turkeys	2,586	
Geese	1,077	101,110
Ducks	4,991	
Swarms of Bees	2,264	5,385
Honey	75,467 †	9,485
Wool	19,019 †	3,170
Milk	2,321,517 †	151,900
Butter	400,928 †	
Eggs	739,690 †	92,460
<b>Total</b>		<b>\$ 4,351,280</b>

\* Bushels. † Pounds. ‡ Dozen.  
 † Tons. § Gallons.

**MANUFACTURES:**—The unusually large agricultural interests of Atchison and surrounding counties call for a local farm implement factory. Hence the loca-

*Photo in heading: Corn Cultivation on D. Rankin's Farm.*

tion at Tarkio of the Midland Manufacturing Company, making plows, windmills and, as a specialty, a two-row disc or shovel cultivator. It employs 70 mechanics, and has contracted for 5,000 implements for the spring of 1904. At Tarkio is located also a 100-barrel flouring mill, a foundry, creamery, a cheese factory, and a brick and tile plant. At Rockport are located a canning factory, a flouring mill, a creamery, a book bindery.

**RAILROADS:**—Three railroads take care of the transportation: the Tarkio Valley Branch of the K. C., St. Joseph & Council Bluffs has 23.58 miles; main line of same, 24.74 miles; and the Rockport, Langdon and Northern, 5.53 miles, within the county confines. Wagon roads cross all streams of importance on steel bridges.

**CHURCHES AND SCHOOLS:**—The United Presbyterian and the Methodist churches at Tarkio, compare favorably with any, save costliest city structures. Tarkio has seven churches; Rockport six; Fairfax and Watson four each; and Westboro two. Tarkio College is one of the State's leading educational institutions. It has buildings costing \$85,000, and an endowment of \$93,203.85. It comprises departments of collegiate, preparatory, normal, commercial and music. It is supported by the United Presbyterian church, and was founded in 1883. It has a twenty-acre campus, a main hall, library, chemical and biological laboratories, gymnasium, recitation rooms, dormitory for young women, and one for young men. Last year's enrollment was 258. Tarkio and Rockport are the seats of high schools approved by the University of Missouri.

**WATER:**—The principal streams are the Missouri river, Nishnabotna, Big Tarkio, Little Tarkio, and Rock creeks. The county is splendidly watered by these and tributary creeks and perennial springs. Tarkio has an artesian well 200 feet in depth. On the Nishnabotna is a club house at Shandy's. Fine fishing is enjoyed in summer at Langdon, where is a summer hotel of some pretension. Crappie, bass and catfish are plentiful.

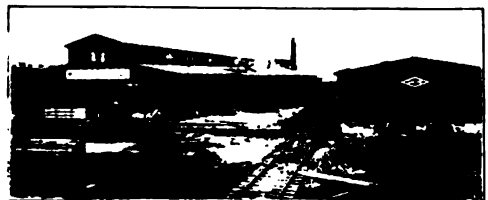
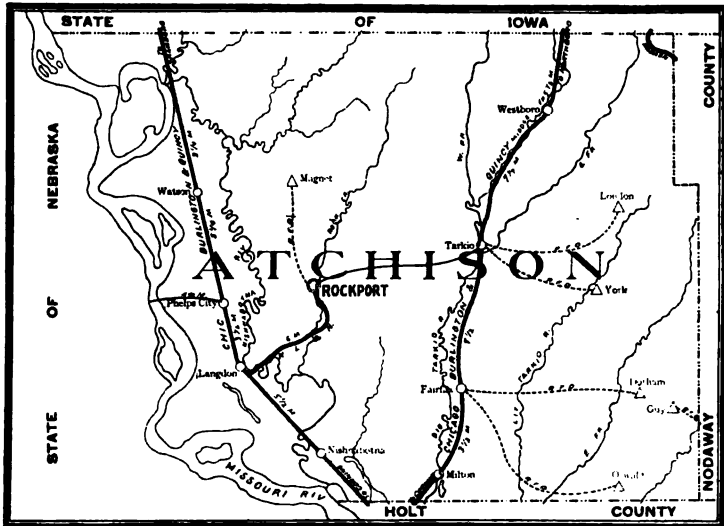
**TOWNS:**—The towns of Atchison are robust, enterprising, farming centers, cleanly and healthful. Tarkio, with electric lights, waterworks, sewerage, two telephone exchanges, and the college, is the largest. Rockport is the county seat, a town of electric lights, waterworks, and other modern improvements. Its spirit is shown in the building of a railroad costing \$100,000, owned and operated for fifteen years by the city. Fairfax, Westboro, Watson, Phelps City and Langdon are good farming towns of enterprise and good citizenship.

**POPULATION:**—White, 16,470; colored, 31; American born, 15,743; foreign born, 758; total, 16,501. Families: owning farm homes, 1,245; renting, 802; owning town homes, 707; renting, 616; total, 3,370.

The newspapers are: Fairfax Forum; Rockport Journal, Rockport Mail; Tarkio Avalanche, Independent, World; Westboro Enterprise.

**FINANCE:**—County tax, 55 cents; school tax average, 42 cents; no indebtedness.

Mo.—21



MIDLAND MANUFACTURING COMPANY, TARKIO.



**H**ORSES, cattle and corn are the chief products of Audrain county. All towns are horse markets and every farm a stock farm. Live stock is high bred, and live stock and live stock products represent a total of nearly four million dollars. Audrain has taken more horse premiums than any other county in Missouri, if not more than any other county in the United States. It is the home of many well reputed stables, including one formerly at the heels of Rex McDonald, king of saddle stallions. Topographically, Audrain county is high, undulating prairie, almost without interruption by streams or wooded strips. It lies twenty miles away from the Missouri river on the south, and about the same distance west of the Mississippi, where it marks the eastern boundary of Pike county. Churches and schools are worthy of mention among the prime elements contributory to the county's greatness. Hardin College for young women, Mexico Military Academy and Mexico High School, all located at Mexico, and the Vandalia High School are among the best institutions of their respective kinds in Missouri.

POPULATION:—White, 19,530; colored, 1,630; American born, 20,597; foreign born, 563; total, 21,160. Farm homes owned, 1,882; rented, 876; other homes owned, 1,053; rented, 839; total families, 4,650.

FINANCE:—County tax, 40 cents on the one hundred dollars' valuation; school tax averages 38 cents; total assessed valuation, \$9,691,342; assessment based upon one-third actual valuation. No county or township indebtedness.

TIMBER:—No commercial timber. Hickory, walnut, birch, cherry, linwood, sycamore, white oak, burr oak, elm, ash, hackberry, in small quantity.

MINERALS:—Coal and fire clay. The county is situated on the eastern border of the coal belt and the coal formation underlies the whole county. The principal mines are located at Farber, Martinsburg, Benton City, Laddonia, and Vandalia. Annual production approximates 33,435 tons. Vein is about thirty inches thick, and is found at thirty-five to one hundred and twenty feet below the surface. Large deposits of fire clay are located at many points within the county. It is utilized in a small way at Mexico.

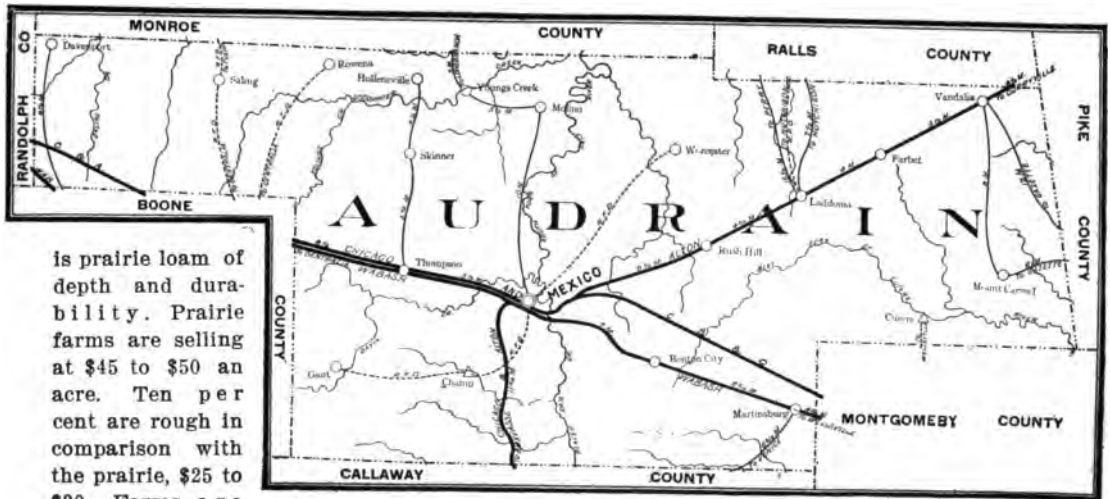
LAND:—Extent in area, 680 square miles, equal to 435,200 acres, of which 372,861 acres are in a high state of improvement. Blue grass is everywhere of spontaneous growth. There are 2,770 farms, averaging 149.9 acres of cultivated, pasture, and other land. Upon the basis of present selling prices, estimated that

the farms are worth \$11,406,368. Each year the income from live stock and cereals sold amounts to a high per cent of total worth of land. To put it otherwise: the Audrain county farm sells sufficient surplus product to pay for itself in a short time. Ninety per cent of the land is high, undulating prairie. Soil

Photos in heading: Yearling Mules, R. B. Buckner, Mexico; Saddle Stallion, Ed Hamilton, Mexico; Premium Mules and Road Mare, B. R. Middleton.

AUDRAIN COUNTY'S 1902 CROP			
	ACRES	PRODUCT	VALUE
Corn	131,123	4,851,550 *	\$ 1,479,725
Wheat	1,254	17,555 *	10,534
Oats	27,549	785,145 *	196,285
Hay	54,260	81,390 †	406,950
Forage	3,685	4,300 †	21,500
Flax	369	2,706 *	2,870
Broom Corn	190	95,000 †	2,615
Clover Seed		15 *	100
Grass Seed		18,300 *	18,620
Tobacco	13	12,350 †	1,110
Potatoes	759	102,465 *	25,615
Vegetables	846		40,890
Total			\$ 2,206,614
LIVE STOCK AND PRODUCTS			
KIND	NUMBER	VALUE	
Cattle	30,735	\$ 1,291,885	
Horses	12,661	814,065	
Mules	4,743	355,725	
Asses and Jennets	212	21,200	
Sheep	33,516	100,550	
Swine	50,822	508,220	
Chickens	163,006		
Turkeys	6,049		
Geese	6,513	156,525	
Ducks	1,631		
Swarms of Bees	3,728	8,235	
Honey	124,967 †	15,535	
Wool	131,360 †	21,895	
Milk	2,345,427 †		
Butter	410,275 †	171,180	
Eggs	799,640 †	90,955	
Total		\$ 3,594,470	
* Bushels. † Pounds. † Dozen.			
† Tons. † Gallons.			

## AUDRAIN COUNTY.



is prairie loam of depth and durability. Prairie farms are selling at \$45 to \$50 an acre. Ten per cent are rough in comparison with the prairie, \$25 to \$30. Farms are well fenced, with good outbuildings and residences, costing from \$500 to \$5,000. Water is obtained at depths ranging from fifty to one hundred feet. Along the banks of South Fork of Salt river and West Fork of Cuivre river are frequent springs of perennial flow which supply water for live stock. In towns and for farm house use cisterns are most common.

**MANUFACTURES:**—These are small in individual extent. The chief manufacturing interests are those of fire brick making and the moulding of stove linings.

**TRANSPORTATION:**—One of the leading advantages offered by the county is transportation facility. Four divisions of railroads operate within the border. Wabash, St. Louis to Kansas City, and to Omaha; Chicago & Alton, Kansas City to St. Louis and Chicago; Chicago & Alton branch to Jefferson City. Mexico is a common point to all these divisions.

**SCHOOLS:**—One of the largest, oldest and best boarding schools for young women in Missouri is Hardin College, under Baptist auspices. Mexico Military Academy is a strong institution for boys. The high schools of Mexico and Vandalia are pursuing a course of study approved by the State University.

**Towns:**—Mexico, population, 5,099, modern improvements; Vandalia, population, 1,168; Laddonia, 619; Martinsburg, 345; Farber, 247; Rush Hill, 181; Benton City, 116; are the incorporated towns, all supported by live stock and farming.

**NEWSPAPERS:**—Mexico: Ledger, Intelligencer, Message, Regular Baptist, Farm and Orchard, Modern Woodcraft; Vandalia Leader, Vandalia Mail and Express; Laddonia Herald; Farber Forum; Martinsburg Enterprise.



AUDRAIN COUNTY THRESHING SCENE.





BARRY COUNTY'S 1902 CROP			
	ACRES	PRODUCT	VALUE
Corn	56,277	1,406,925 *	\$ 448,180
Wheat	65,610	1,082,565 *	599,410
Oats	6,273	188,190 *	49,870
Hay	10,077	15,510 †	116,325
Forage	2,845	3,820 †	19,100
Broom Corn	28	15,400 †	425
Clover Seed		1,300 *	7,280
Grass Seed		30 *	50
Cotton	55	17,875 †	1,250
Tobacco	61	41,600 †	4,160
Potatoes	1,092	109,200 *	38,220
Vegetables	930		33,975
Total			\$1,307,245
LIVE STOCK AND PRODUCTS			
KIND	NUMBER	VALUE	
Cattle	19,742	\$ 493,560	
Horses	8,435	504,100	
Mules	2,518	176,266	
Asses and Jennets	108	9,720	
Sheep	7,926	23,780	
Swine	28,188	281,880	
Chickens	118,344		
Turkeys	2,689		
Geese	4,730	88,815	
Ducks	3,422		
Swarms of Bees	1,425	4,005	
Honey	47,500 †	5,935	
Wool	26,095 †	4,340	
Milk	2,143,390 \$ †	178,375	
Butter	451,237 †		
Eggs	692,860 †	86,605	
Total		\$1,859,365	
* Bushels.	† Pounds.	‡ Dozen.	
† Tons.	\$ Gallons.		

\$1.65, average 62 cents; total assessed valuation, \$4,287,104; assessed valuation per cent of actual valuation, 33; no county debt; no township debt.

Photo in heading: Apple Orchard near the Frisco Railroad.

**TIMBER:**—In the aggregate, there is approximately 60 per cent of Barry county under timber, generally of small, second growth. Black oak accounts for three-fifths of this, post oak another fifth, and the balance is black-jack, sycamore, elm, maple, and linden.

**MINERALS:**—Northern and northwestern portions are promising of mineral. Lead and zinc mines are at Purdy, Pioneer, and McDowell. Limestone is abundant everywhere along streams. It is said to be of high grade, in fact, similar to that found at Carthage, in an adjoining county. Sandstone is found in central eastern sections.

**LAND:**—Generally well adapted to agricultural purposes, being comparatively level and free from stones.

County is rough in the central eastern section and in the southeastern part, except at Hickam prairie south of the river in the extreme southeastern corner. In the north and west are prairies, the northern portion being rolling. Except among the hills the soil is fertile and will produce satisfactory grain, grass, and fruit crops. A gravelly clay loam of desirable depth with porous red clay subsoil is of predominating extent, outside of creek and river bottoms. Along the streams the soil is of alluvial fertility. Land sells as follows: improved prairie, \$20 to \$40; river and creek bottoms, \$25 to \$50; ridges, \$5 to \$15; unimproved, \$1.25 to \$5 an acre. Acres of government land, 9,484; available to homestead at \$1.25 an acre.

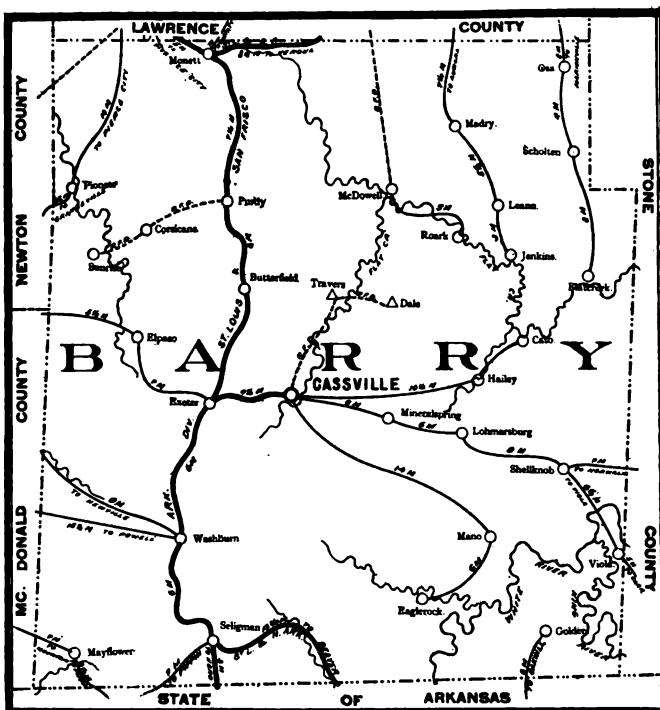
**FRUIT AND FRUIT LANDS:**—In vicinity of Monett strawberries are extensively grown. In the north and northwest, commercial apple orchards are taking up the land. There are also important planting of apples, peaches, and strawberries centering at Seligman, Purdy, Exeter, and Washburn. Fifty thousand crates of strawberries were exported last year.

**MANUFACTORIES:**—Ice plant, cutlery factory, several flouring mills, saw mills, woolen mills, spoke and canning factories.

**TRANSPORTATION:**—Frisco north and south through county, and also north edge, the lines connecting at Monett, an important railroad town. St. Louis & Northern Arkansas branches off from Frisco at Seligman. Cassville & Western connects Cassville with the main line at Exeter.

**TOWNS:**—Monett, population, 3,115, Frisco railroad division point and junction. Cassville, population, 702, county seat; Exeter, 438, canning and drying factory. Purdy, 434, nurseries. Washburn, 169; Seligman, Eagle Rock, Pioneer, Corsicana, McDowell, Jenkins, Golden, Shell Knob and Scholten. Farming is the chief support of all towns excepting Monett.

**NEWSPAPERS:**—Cassville Democrat, Republican; Monett Times, Daily Star, Eagle; Purdy News.



LAND OF THE LUSCIOUS APPLE.

# BARTON



**B**ARTON is the fifth county south of Kansas City in the extreme western tier of counties. As a whole it is a high, undulating prairie, and its chief industrial and commercial activities are based upon farming, stock raising, and coal mining. Of the 612 square miles, or 391,680 acres of land, 311,024 are improved farms. Including land of cultivable, pasture and yet uncultivated, the 2,590 farms average 134.2 acres, actual value of which is \$7,645,110. Population: white, 18,205; colored, 48; American born, 17,679; foreign born, 574; total, 18,253. Farm homes owned, 1,476; rented, 989; town homes owned, 785; rented, 756; total families, 4,006.

**MINERALS:**—Coal is mined in nearly every township, 200,433 tons being the amount of last annual production. Indications are that the mineral underlies the entire county, and coal production has increased annually since its discovery.

Mostly the veins lie close to the surface, varying to 120 feet in depth, and in thickness twenty-five to forty inches. Chief mines are at Minden, Burgess, Liberal, Oskaloosa, Barton City, and Iantha. Farmers do surface mining for local markets, where wagon loads of coal are always to be had at \$2.50 to \$3 a ton. White and red sandstone are mined at Liberal and Lamar. Both qualities are found in abundance along the streams. Asphaltum is found in northeast corner of county. Industry is of infant proportions but the future is promising.

**LAND:**—Prairie, broken only by small streams. Originally twenty per cent along Spring river and lesser streams bore black and white oak, hickory, cottonwood, ash, linwood, walnut, and elm. Nine-tenths has been removed. A ton of coal is as cheap as a cord of wood. Soil is dark sandy loam, usually eighteen inches to two feet deep, of uniform producing quality. A representative Barton county farm grows corn, hay, wheat, and oats, and frequently flax, castor beans, sugar cane, millet or broom corn. Hay is the most profitable crop. In further type, this farm would be less than one hour from a good town; dwelling to cost \$1,000; the tract worth \$40 an acre. Bulk of farms sell at \$35 to \$45. Close to Lamar they advance to \$60 or \$75, a few finely improved homes adjoining town valued at \$100 an acre. Near Liberal and Golden City land sells at \$40 to \$50.

Coal lands in the west tier of townships, sell at \$75 to \$150. The small per cent of timbered land along the streams, too rough for cultivation, is worth \$10 to \$20. No land overflows. A high prairie ridge crosses east and west through center,

*Photo in heading: A Business Street in Lamar.*

BARTON COUNTY'S 1904 CROP			
	ACRES	PRODUCT	VALUE
Corn	109,946	3,848,110 *	\$1,212,185
Wheat	10,500	210,000 **	115,500
Oats	11,943	394,120 *	104,440
Hay	23,391	35,085 †	228,055
Forage	6,365	8,486 †	42,425
Flax	10,283	41,132 *	42,775
Broom Corn	375	206,250 ‡	5,670
Clover Seed		10 **	55
Grass Seed		4,000 *	6,400
Tobacco	6	3,900 ‡	390
Potatoes	579	81,060 *	28,370
Vegetables	1,015		89,615
Total			\$1,825,880
LIVE STOCK AND PRODUCTS			
KIND	NUMBER	VALUE	
Cattle	30,875	\$ 849,065	
Horses	10,612	636,720	
Mules	2,728	190,960	
Asses and Jennets	88	8,300	
Sheep	5,297	15,890	
Swine	26,679	266,790	
Chickens	131,955		
Turkeys	5,450	101,550	
Geese	2,408		
Ducks	4,018		
Swarms of Bees	1,700	4,125	
Honey	56,660 ‡	7,085	
Wool	19,245 ‡	3,210	
Milk	2,766,342 \$	152,710	
Butter	600,448 ‡		
Eggs	947,690	118,450	
Total		\$2,354,855	
* Bushels. † Pounds ‡ Dozen			
† Tons. \$ Gallons.			

causing streams on the north side to flow northwardly and those south of the divide to flow in opposite direction.

**TRANSPORTATION:**—Missouri Pacific, Joplin to Kansas City and St. Louis, has three passenger trains each way daily. Mileage, 36.25; Kansas City Southern, 8.72; St. Louis & Santa Fe, 7.01; Kansas City, Clinton & Springfield, 34.71.

**SCHOOLS:**—Lamar has a fourteen-room modern brick building erected in 1894, at a cost of \$25,000; Golden City High School of eight rooms, costing \$11,000; Liberal, an eight-room stone and frame building; Lamar College, 125 students, non-sectarian, established 1897. With regard to schools the county has always ranked especially high and within the past ten years educational sentiment has largely increased, in pace with the stride set by the State as a whole.

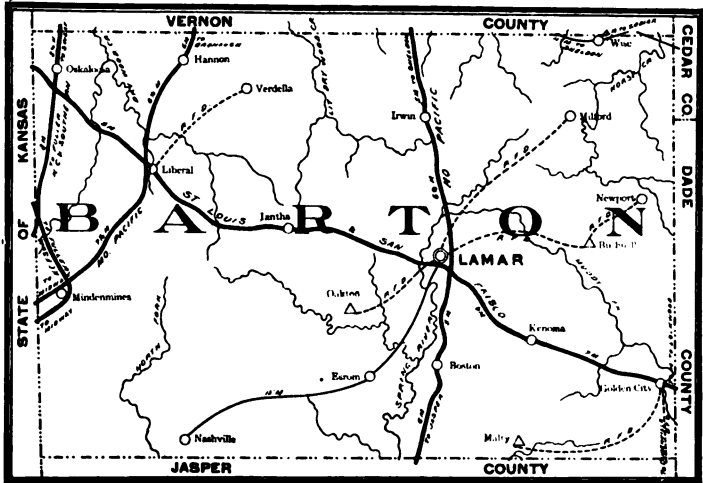
**CHURCHES:**—Lamar has Methodist, Presbyterian, Baptist, Christian, Congregational, Episcopal, and Catholic denominations. Liberal has Christian, Methodist, and Baptist; Iantha, Presbyterian and Baptist; Milford, Presbyterian and Christian. Country churches are numerous and well improved.

**WATER:**—Both soft and hard are found. In towns cisterns predominate; in country, wells at forty-foot depth. Stock water is supplied from deep wells by wind mill means.

**TOWNS:**—Lamar, situated around court house square, has twelve miles of broad, shaded, gravelled streets; waterworks, electric lights, fire department. Gloves and overalls, twine and sack holder, machine castings, cigars, wagons and flour are the factory products. Golden City, substantial farm town, gravelled streets, telephone, and mill. Liberal, Milford, Iantha, and Boston are farming towns, and Minden is a coal mining camp.

**FINANCE:**—County tax, 50 cents; school tax, from 20 cents to \$1.25; average, 60 cents; assessed valuation one-half of real valuation; county debt, \$23,000. No township debt.

**NEWSPAPERS:**—Lamar Democrat, Leader, Sentinel, Republican; Liberal Enterprise, Independent; Golden City Herald, Free Press.



FARM SCENE NEAR LAMAR, THE COUNTY SEAT.



**B**ATES is situated upon the Kansas border, forty miles south of Kansas City. It is one of those counties which lend mighty force to bring far west, even to our own door, the corn growing center of the United States. The county has an aggregate of value considerably in excess of four millions of dollars worth of cattle, horses, mules and hogs, and it produces over two million dollars worth of corn, and more than one-half million dollars worth of hay. In physical size, Bates is the fourth county in Missouri, containing 873 square miles. In coal production it is fourth. The far-famed Rich Hill district, and other mines in the county, account for an output

of 359,061 tons a year. The pride of the county is its fine blooded live stock. All leading beef and dairy breeds of cattle, light harness, draft and saddle horses, fine mules, improved swine and sheep are found, and in large extent.

**POPULATION:**—White, 29,834; colored, 307; American born, 29,047; foreign born, 1,094; total, 30,141. Farm homes owned, 2,357; rented, 1,529; other homes owned, 1,563; rented, 1,207; total families, 6,656.

**FINANCE:**—County tax, 35 cents on the one hundred dollars; school tax averages 50 cents; total assessed valuation, \$10,642,363; assessed valuation per cent of actual valuation, 40; no county debt; township debt, \$128,000.

**TIMBER:**—Oak, white and black; hickory, elm and walnut for home use only. Not of commercial consequence.

**MINERALS:**—Most of county is underlaid with good quality of bituminous coal. Miners employed, 509. Thirty mines operated; six shafts, five slopes, four drifts and fifteen strip-pits. The Rich Hill Mining District is largest in county. Other mines are at Foster, Hume and Worland. Black mineral oil and natural gas are found in northwest part of county; both are utilized in small way. Good building stone is found all along the streams.

**LAND:**—Everywhere the land is prairie excepting along streams. It is generally of the undulating type, though adjoining the rough stream-abutting strips the land is rolling, receding

*Photo in heading: Farm of W. P. Duval, near Butler.*

BATES COUNTY'S 1902 CROP			
	ACRES	PRODUCT	VALUE
Corn	173,372	6,588,135 *	\$2,075,285
Wheat	17,486	349,720 *	192,345
Oats	11,519	322,530 *	85,470
Hay	61,714	98,740 †	543,070
Forage	15,875	7,835 †	39,175
Flax	14,677	58,708 *	61,055
Broom Corn	698	383,900 ‡	10,555
Clover Seed		2,825 *	15,820
Grass Seed		7,985 *	12,775
Tobacco	6	3,900 ‡	390
Potatoes	1,121	145,730 *	51,005
Vegetables	1,155		63,560
Total			\$3,150,485
LIVR STOCK AND PRODUCTS			
KIND	NUMBER	VALUE	
Cattle	48,443	\$	1,574,500
Horses	17,770		1,184,665
Mules	4,073		305,475
Asses and Jennets	140		14,000
Sheep	6,477		21,455
Swine	85,621		836,210
Chickens	271,311		
Turkeys	8,013		194,315
Geese	3,978		
Ducks	5,556		
Swarms of Bees	3,064		6,905
Honey	102,133 ‡		12,770
Wool	23,604 ‡		3,935
Milk	3,826,288 \$		
Butter	688,428 ‡		225,025
Eggs	1,444,120 ‡		180,515
Total			\$4,559,770
* Bushels.	‡ Pounds.	‡ Dozen.	
† Tons.	\$ Gallons.		

gradually into the level lying sort. Soil is dark clay loam, as a rule, well drained, and fertile. Soil of lands adjacent to Grand river on the north, Osage river in the south, and their numerous tributaries, is alluvial—deposits of overflows which occur, on the average, semi-annually, to the enrichment of the lands and with no serious effects to improvements. Price of land is the most striking matter in the county's connection. Farming land sells at \$35 to \$40 an acre; only a few select locations being in advance of this. All farms have small orchards for individual use. Number of apple trees average per farm, 48; peach trees, 6.

**MANUFACTURES:**—Are of local importance only. Liberal inducements are

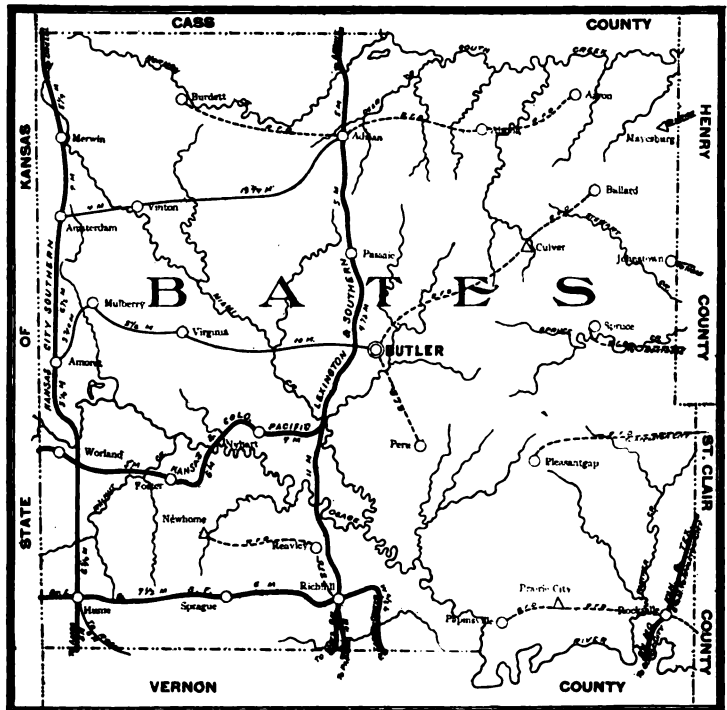
offered for new factories. Coal is an item of favor to their location here.

**TRANSPORTATION:**—County is well supplied. Kansas City, St. Louis & San Francisco, Kansas City Southern, Missouri, Kansas & Texas, and the Missouri Pacific intersect the county.

**SCHOOLS:**—There are 137 independent school districts which employ 191 teachers at an annual expenditure of \$73,895. Total enumeration, 9,246; average daily attendance, 5,286. Total value of school property, \$278,700. Average length of terms, 140 days. High schools cap-sheaf systems at Butler, Rich Hill, Adrian, Hume, Rockville, and Amsterdam.

**TOWNS:**—Rich Hill, population, 4,053, center of mining district and convenient to agricultural trade; Missouri Pacific and Frisco Railroads. Butler, population, 3,158, county seat, live stock breeding and feeding and farming. Adrian, population, 629; Rockville, population, 580; Hume, population, 540; Merwin, Foster, Amoret, Sprague, Amsterdam, Papinsville, Worland, Johnstown and Altona are all largely supported by farming interests, and Hume and Foster have additional support of mining. Towns are characterized by substantial buildings, and the several largest have the customary modern improvements.

**NEWSPAPERS:**—Butler Democrat, Times, Record, Central West, Republican Press; Rich Hill Mining Review, Western Enterprise, Tribune, Coming Nation; Hume Telephone; Amsterdam Enterprise; Adrian Journal; Foster Times.



GETTING READY FOR THE MILLER.



**B**ENTON is an inland-border county. Inland, in that it is three counties east of Kansas and three south of the Missouri river; border, in that it lies at the point where prairie lands adjoin the foothills of the Ozark mountains. Osage river divides it in twain. North of the river lies land in prairie stretches or long sloping hills; south of the river in precipitous bluffs, timber covered hills and mountain flatwoods. There are 744 square miles of surface, 476,160 acres, of which 190,923 are in cultivation. Farms number 2,575 of 142.8 acres, average size, containing arable, pasture and firewood lands. Estimated real value of farm lands, \$5,096,940. Corn, cattle, and horses and mules are leading products.

**TIMBER:**—More than two-thirds of county area was formerly timbered with white oak, black oak, post oak, hickory, elm, cedar, walnut, black-jack and scrub oak. Saw mills of less than twenty thousand feet daily capacity are located at Warsaw and Hastain; there are many portable mills. Rough hardwood lumber is plentiful at \$16 a thousand feet. Cordwood, \$2.50 per cord.

**MINERALS:**—Zinc and lead mines center at Raymond, where one mine employs thirty-five men. Output has continued two years; mine operated on eastern capital. Results have been small. Limestone and sandstone deposits along river reveal excellent quality of mineral; undeveloped. Barite, for white paint adulteration, is plentiful and untouched. Iron ore is picked up on surface; has never been shipped.

**LAND:**—Between one-third and one-fourth is prairie, in lay from undulating to rolling. It lays mainly in the northwest corner, bounded by the railroad on the east and the breaks of the Osage river on the south. Farms are well improved; roads follow section lines. Soil is black and mulatto prairie loam, one to three feet deep. Prices range from \$30 to \$40, with an occasional \$25, and a few \$50 farms. Cereals and hays of all kinds thrive herein. Little over one-half of the county is hill land, timbered, unimproved, worth \$5 an acre. Surface is generally flint rock bearing. Subsoil

BENTON COUNTY'S 1902 CROP			
	ACRES	PRODUCT	VALUE
Corn	73,172	2,707,364 *	\$ 798,675
Wheat	10,705	214,100 *	117,775
Oats	7,515	263,025 *	69,700
Hay	21,248	33,995 †	169,975
Forage	5,855	7,320 †	36,600
Flax	1,792	10,762 *	10,985
Broom Corn	418	209,000 †	5,750
Clover Seed		240 *	1,315
Grass Seed		790 *	1,120
Tobacco	40	28,000 †	2,660
Potatoes	668	93,520 *	29,925
Vegetables	848		31,225
Total			\$1,276,015
LIVE STOCK AND PRODUCTS			
KIND	NUMBER	VALUE	
Cattle	28,338	\$ 779,295	
Horses	8,752	525,120	
Mules	2,442	170,940	
Asses and Jennets	97	8,730	
Sheep	11,328	34,015	
Swine	28,487	284,870	
Chickens	140,963		
Turkeys	4,152		
Geese	4,506	81,510	
Ducks	1,481		
Swarms of Bees	1,001	1,895	
Honey	33,367 †	4,170	
Wool	88,032 †	6,835	
Milk	1,878,465 †	126,565	
Butter	359,772 †		
Eggs	909,380 †	113,670	
Total		\$2,287,115	
* Bushels. † Pounds. † Dozen.			
† Tons. † Gallons.			

Photo in heading: Warsaw, on the Osage River.

is clay; top soil is sometimes thick black vegetable mould, more often gravelly clay. Hill and valley farms embrace one-fifth. They are less well improved than are prairie farms. Best half bring \$25 to \$35; one-fourth are available at \$15 to \$20, and remaining one-fourth at \$10 or \$15. Ordinarily the hill farm has one-third in cultivation.

**MANUFACTURED PRODUCTS:**—Flour, and zinc monuments are manufactured. At Warsaw a company manufactures thirteen different styles of zinc grave monuments, shipped to nearly every western State.

**TRANSPORTATION:**—Missouri Pacific branch to Sedalia, 29 miles, taxed road-bed; Rock Island, St. Louis to Kansas City, intersects Missouri Pacific at Cole Camp. Osage river, second in size to the Missouri river, furnishes timber, transportation and excursion boating.

**WATER:**—Main streams are Osage and Grand rivers, Deer Creek, Tebo, Pomme de Terre, Turkey, Cole Camp, and Williams Creeks. Well water is hard and soft, containing sulphur at one place, Clark's. On the prairie clear limestone-filtered water is to be had at twenty to thirty feet. In the mountains springs abound, and there are few wells.

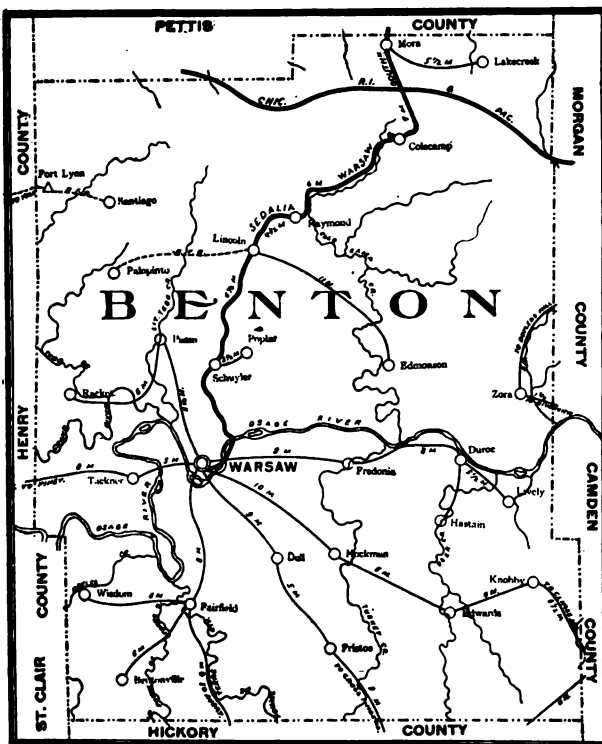
**FISHING:**—Cat, buffalo, carp, jack salmon, bass, sun perch, suckers, and sturgeon are caught with the hook. Catfish weighing fifty pounds was caught at Warsaw. Many parties from central Missouri spend summer days upon the Osage river.

**TOWNS:**—Warsaw, county seat; Cole Camp, railroad junction town; Lincoln, Fairfield, Edwards and Hastain; all deriving most support from agriculture and stock raising.

**POPULATION:**—White, 16,366; colored, 190; American born, 15,909; foreign born, 647; total, 16,556. Farm homes owned, 1,994; rented, 604; other homes owned, 462; rented, 319; total, 3,382.

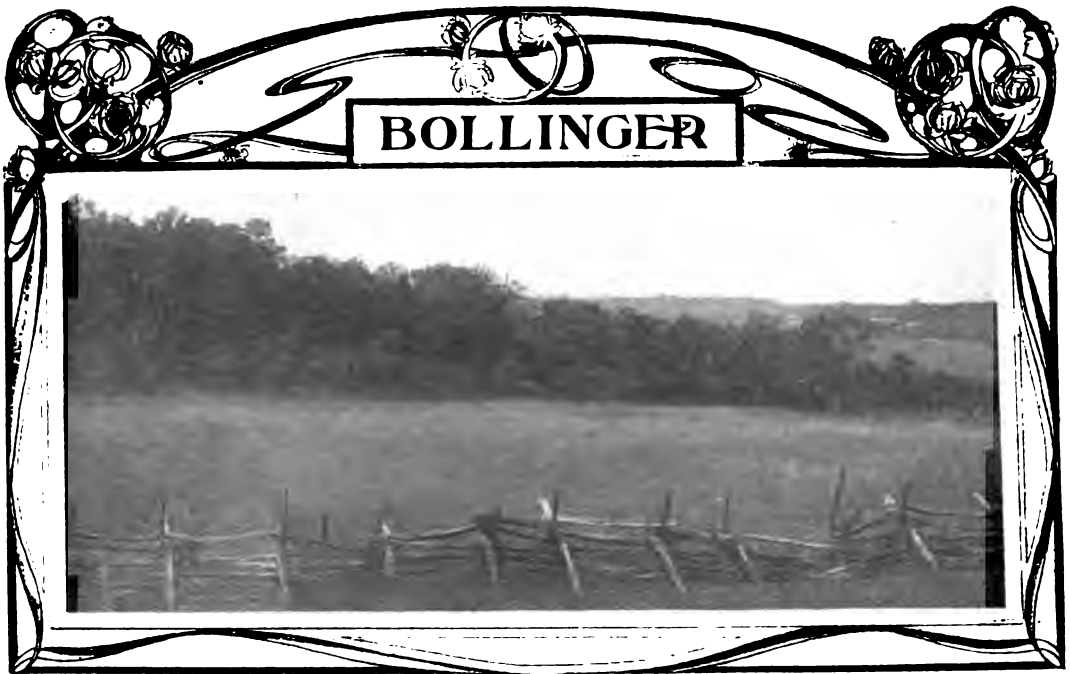
**FINANCE:**—County tax, 40 cents; school tax, from — cents to \$1.15; average, 50 cents; total assessed valuation, \$3,689,207; forty per cent of real valuation; county debt, \$260,000. No township debt.

Population of German descent inhabits northeastern portion of county, but not in majority.



ZINC MONUMENT WORKS, T. B. WHITE.





**B**OLLINGER is situated twenty miles west of the Mississippi river, at a point one hundred miles down stream from St. Louis. One-third of its acreage—129,470 acres out of 394,240—is devoted to culture of cereals. Two-thirds of the county is unimproved and bears timber. Hardwood timber interests, large in no one place, but forming, with agriculture, the support of several small towns, will be in evidence for many years. Marble

of high grade is found at Marble Hill, county seat. Butter and milk constitute a relatively important item in farm production. Fruit growing is on the increase. Land and climate are especially favorable to strawberries. There are 2,298 farms, averaging in size, 119.4 acres, of a total actual valuation of \$2,923,996. Surface is generally rough, bordering mountainous, and at the southern edge is land of low, level type.

**POPULATION:**—White, 14,636; colored, 14; American born, 14,414; foreign born, 236; total, 14,650. Farm homes owned, 1,802; rented, 479; other homes owned, 248; rented, 320; total families, 2,849.

**FINANCE:**—County tax, 50 cents on one hundred dollars; school tax 5 cents to \$1.30, average, 45 cents; assessed valuation, \$2,575,343; assessed valuation per cent of actual valuation: on farms, 50; town lots 66 2-3; personal property 40.

**TIMBER:**—Black oak, white oak, post oak, and hickory predominate in uplands. Red gumwood and cypress are chief in lowlands. White oak has been largely removed in railroad ties. Some walnut once grew on river sides.

**MINERALS:**—Indications of lead, zinc, copper, iron, kaolin, marble, and granite. First three are mainly in northern half of county; iron occurs between central line and swamps. Kaolin is in central western part, near Glen Allen. Limestone is common everywhere.

**LAND:**—North half of county is often rough and broken, though in places it is only rolling. This region

BOLLINGER COUNTY'S 1902 CROP			
	ACRES	PRODUCT	VALUE
Corn	31,710	872,025 *	\$ 327,010
Wheat	31,569	347,560 *	205,060
Oats	6,105	164,835 *	54,945
Hay	9,529	9,530 †	81,005
Forage	1,795	2,090 †	10,450
Broom Corn	4	2,000 ‡	55
Clover Seed		115 *	635
Grass Seed		60 *	180
Cotton	65	21,450 ‡	1,610
Tobacco	31	22,010 ‡	2,200
Potatoes	435	36,975 *	17,750
Vegetables	660		38,070
Total			\$ 733,920
LIVE STOCK AND PRODUCTS			
KIND	NUMBER	VALUE	
Cattle	13,114	\$ 293,065	
Horses	5,092	305,520	
Mules	1,911	114,660	
Asses and Jennets	24	2,160	
Sheep	8,445	25,335	
Swine	29,326	298,200	
Chickens	72,358 †		
Turkeys	3,098	59,300	
Geese	7,450 †		
Ducks	2,448 †		
Swarms of Bees	1,010	2,132	
Honey	33,667 ‡	4,208	
Wool	30,675 ‡	5,113	
Milk	1,343,155 \$ †	110,545	
Butter	246,771 ‡		
Eggs	376,650 ‡	47,080	
Total		\$1,264,378	
* Bushels.	† Pounds.	‡ Dozen.	
† Tons.	\$ Gallons.		

Photo in heading: A Fertile Valley Farm on Castor River.

embraces farms scattered, and a large acreage of wild lands susceptible of cultivation. Streams have generous bottoms, location of best farm lands. Southern one-fifth of the county is low land, in the south side, water-soaked. These flat lands contain much good farming soil. Best improved bottom lands are valued at \$20 an acre; unimproved, \$10 to \$12.50. Improved upland plateaus average \$7 an acre; unimproved ridges, \$1 to \$5. There are 1,521 acres belonging to the government, which may be taken up at \$1.25 an acre. The latter embraces both lowland and bluffs.

**FRUIT:**—North of a point five miles south of Lutesville is found land eminently adapted to fruit growing. Strawberries and pears may be grown to profit in the central and southern portions. North thereof the land is rougher and bears more stone upon its surface. Apples and peaches thrive herein. Fruit land, within a few hours of market may be had in Bollinger county at \$5 to \$10 an acre.

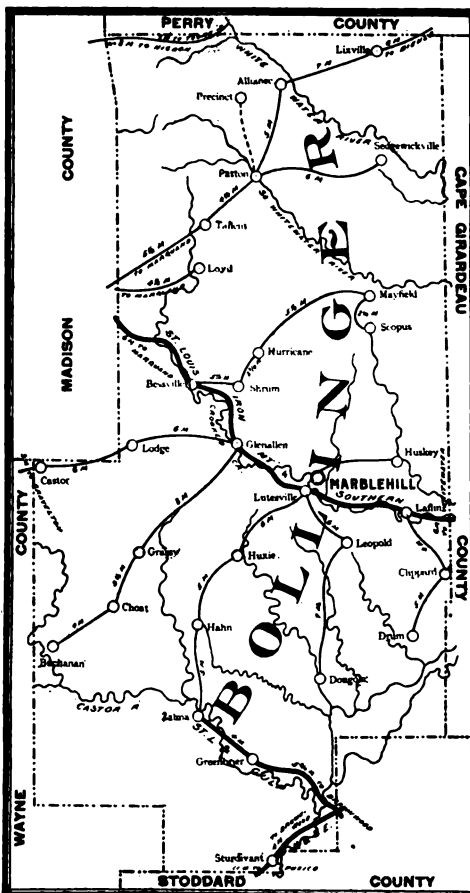
**MANUFACTORIES:**—Small saw mills are numerous, stave factories, flouring mills, distilleries, wool carding mill, soda water factory and fruit evaporator. There is also a nursery supplying a trade in this and adjoining counties.

**TRANSPORTATION:**—Belmont Branch of St. Louis, Iron Mountain & Southern; St. Louis & San Francisco; branch of the Frisco, connects Brownwood and Zalma.

**TOWNS:**—Lutesville, population, 525, is chief railroad town, located just across a small creek from Marble Hill, county seat. It supports a large flouring mill, stave factory and wagon shops, and is a leading shipping point for gravel. Marble Hill has a population of 295. Zalma has a flouring and a stave mill. Its inhabitants are engaged in shipment of lumber and railroad ties. Patton has a flouring mill and stave factory. Hahn, Scopus, Greenbrier, Sturdivant, Buchanan, Dongola, Glen Allen, and Lafin have saw mills and timber interests. Sedgewickville is a leading trading point in the northeast.

**SCHOOLS:**—Will Mayfield Academy, Marble Hill and a training school at Sedgewickville, are the foremost. Marble Hill and Lutesville have good graded school systems.

**NEWSPAPERS:**—Marble Hill Press; Lutesville Banner.



REPRESENTATIVE MISSOURI FARM SCENE.



**B**YOND being among the foremost counties in live stock and in the cultivation of corn, Boone has been called to the cultivation of mind and heart. A million dollars a year are expended in a Boone county town for education. The State of Missouri provides here for the higher education of her sons and daughters, and sixteen hundred annually accept the invitation to attend the University of Missouri, located at Columbia. Instruction is given in the academic and graduate departments and in the departments of law, engineering, medicine, agriculture, horticulture, military

science and tactics, and education. Instruction is without charge. In addition to the State University, there are the Missouri Bible College, Christian Female College, Stephens Female College, Columbia Normal Academy and the University Academy. Approved High Schools are located at Centralia and at Columbia.

**POPULATION:**—White, 24,078; colored, 4,564; American born, 28,366; foreign born, 276; total, 28,642. Farm homes owned, 2,604; rented, 864; other homes owned, 1,291; rented, 1,462; total families, 6,221.

**FINANCE:**—County tax, 40 cents on one hundred dollars valuation; school tax average, 42½ cents; total assessed valuation, \$10,028,403; assessment based upon one-half of actual valuation. No indebtedness.

**TIMBER:**—Three-fourths of the area was originally timbered. Scarcely one-fourth is in that condition now. Hickory, ash, elm, wild cherry, hackberry, walnut, oak and maple were the chief trees. Sugar maple, once numerous, is well nigh extinct. There are but two or three groves in the county.

**LAND:**—County contains 680 square miles of land, 435,200 acres, of which 301,732 acres are in a high state of cultivation. There are 3,540 farms, averaging 115.3 acres, worth an aggregate of \$10,444,541. The land may be divided into 100,000 acres of undulating prairie, worth \$45 an acre; ten thousand acres of river bottom, selling at \$50 an acre; something over 200,000 acres of rolling upland, selling at \$30 an acre, and 100,000 acres

BOONE COUNTY'S 1902 CROP			
	ACRES	NUMBER	VALUE
Corn	90,586	4,529,800 *	\$1,333,145
Wheat	23,404	626,590 *	289,625
Oats	7,169	266,580 *	70,645
Hay	45,848	72,555 †	471,610
Forage	8,365	4,905 †	21,025
Broom Corn	93	46,500 ‡	1,280
Clover Seed		3,470 ‡	19,430
Grass Seed		70 *	125
Tobacco	71	49,700 ‡	4,725
Potatoes	755	105,700 *	33,825
Vegetables	870		44,470
<b>Total</b>			<b>\$2,319,905</b>
LIVE STOCK AND PRODUCTS			
KIND	NUMBER	VALUE	
Cattle	35,965	\$1,168,865	
Horses	12,088	806,865	
Mules	5,465	409,875	
Asses and Jennets	962	31,440	
Sheep	19,765	65,685	
Swine	51,308	512,080	
Chickens	175,971		
Turkeys	9,360		
Geese	7,738	164,580	
Ducks	1,518		
Swarms of Bees	2,295	5,520	
Honey	76,583 ‡	9,565	
Wool	76,316 ‡	12,720	
Milk	2,970,321 §	219,090	
Butter	500,906 ‡		
Eggs	910,300	113,775	
<b>Total</b>		<b>\$3,519,260</b>	
* Bushels. † Pounds. ‡ Dozen. § Gallons.    Tons.			

Photos in heading: Academic Hall and the Old Columns, University of Missouri.

of rough white oak land which may be bought at \$20 an acre. Near the towns of Columbia, Centralia and Sturgeon are farms held at \$90 an acre, and immediately adjoining these towns are small tracts held as high as \$200 an acre. Soil is of three kinds: alluvium next to the Missouri river; brown loam of loess type immediately adjoining the alluvium, in a strip a mile wide; and prairie loam soil, embracing three-fourths of the county.

**MINERALS:**—Coal, building stone, sand. Coal is mined near Brown's Station, Columbia, Harrisburg and Rucker. It is said that the coal area underlies 60,000 acres of mineable land with the seam found from within a few feet of the surface to a depth of 150 feet. Reliable estimate places the coal tonnage of the county at 360,000,000, showing a resource worth, at low estimate, \$540,000,000. The vein is the same as that found in Macon and Randolph counties. It averages four feet thick.

**TRANSPORTATION:**—Main lines: Wabash, Missouri, Kansas & Texas, Chicago & Alton, all giving direct passage to Kansas City and St. Louis. The Wabash operates a branch from Centralia to Columbia, and the M., K. & T. gives Columbia main line service by running passenger trains over a branch from McBaine to Columbia and return.

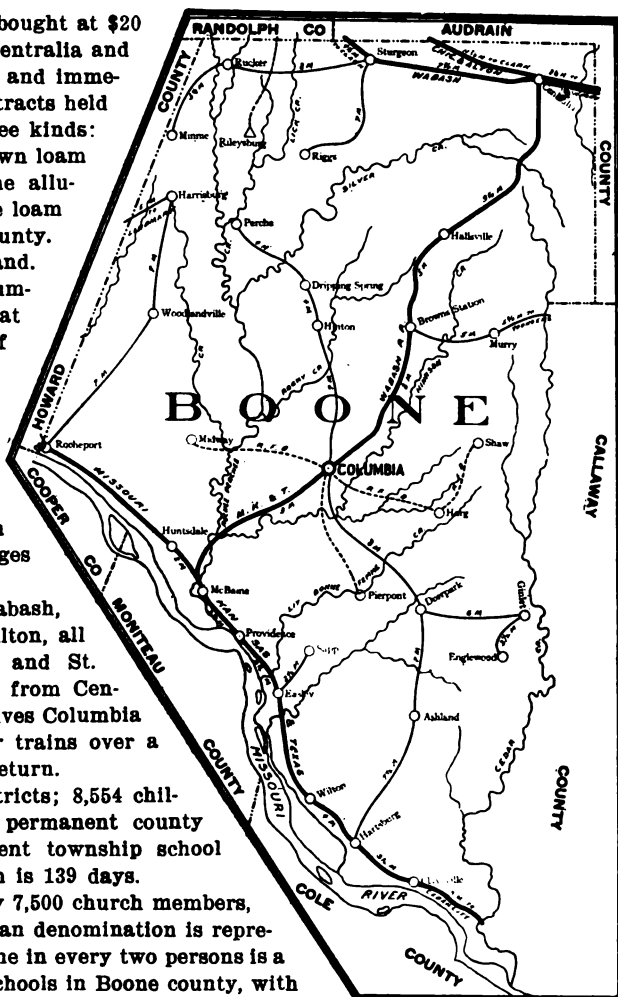
**PUBLIC SCHOOLS:**—There are 107 districts; 8,554 children of school age. The county has a permanent county school fund of \$41,442.70, and a permanent township school fund of \$35,484.38. Average school term is 139 days.

**CHURCHES:**—There are in the county 7,500 church members, owning 76 church edifices. Every Christian denomination is represented. Counting the adult population, one in every two persons is a church member. There are 66 Sunday Schools in Boone county, with 5,600 officers, teachers and pupils.

**PUBLISHING HOUSE:**—Largest commercial establishment is the E. W. Stephens Publishing House, employing 100 people, doing business in every State and territory; prints supreme court reports, digests or statutes for the States of Missouri, New Mexico, Iowa, Arkansas, Tennessee, Arizona, Utah.

**TOWNS:**—Columbia, county seat, population 5,651, school town; Centralia, 1,722, live commercial and shipping point. Both these towns have modern improvements, and private properties are kept in excellent condition. Sturgeon, 708, one of the wealthiest towns in Missouri; Rocheport, 593; Ashland, 401; Hallsville, 157. Each the center of rich farming community.

**NEWSPAPERS:**—Weekly: Herald, Statesman, M. S. U. Independent; Centralia Guard, Courier; Hallsville Eagle; Sturgeon Leader; Rocheport Democrat; Ashland Bugle; Hartsburg Truth. Columbia Daily Tribune.



COLUMBIA MISSOURI HERALD BUILDING.

# BUCHANAN



**O**UTSIDE the wholesale and manufacturing interests of its chief city, St. Joseph, Buchanan county's maintaining element is agriculture. St. Joseph is the largest wholesale dry goods mart west of St. Louis. It is a city of over 100,000 inhabitants, a city of amassed wealth and mass employment, and thus affords enhanced reward to agricultural pursuits within the county. Adjacent the city limits are small truck farms, and farther out fine old homesteads with large acreages, devoted to live stock breeding and feeding. Horticulture, by reason of special fitness of soil and proximity of market, is an important industrial asset. Fully one-half of the soil is brown loam loess, peculiarly favorable to orchards.

BUCHANAN COUNTY'S 1902 CROP			
	ACRES	PRODUCT	VALUE
Corn	74,470	3,574,500 *	\$1,125,985
Wheat	32,318	628,250 *	391,245
Oats	6,591	230,685 †	59,980
Hay	18,637	32,050 †	228,550
Forage	1,950	2,600 †	13,000
Broom Corn	68	31,900 †	875
Clover Seed		680 *	3,740
Grass Seed		400 *	620
Tobacco	15	13,500 †	1,350
Potatoes	2,715	407,250 *	97,740
Vegetables	1,545		75,610
Total			\$1,968,605
LIVE STOCK AND PRODUCTS			
KIND	NUMBER	VALUE	
Cattle	28,346	\$ 321,245	
Horses	9,208	613,865	
Mules	2,826	211,950	
Asses and Jennets	125	12,500	
Sheep	3,202	10,675	
Swine	47,831	478,810	
Chickens	135,928		
Turkeys	3,878	117,630	
Geese	3,241		
Ducks	2,429		
Swarms of Bees	1,900	5,440	
Honey	63,333	7,915	
Wool	13,080	2,180	
Milk	3,514,524 \$	353,225	
Butter	463,991 †		
Eggs	758,800 †	91,850	
Total		\$2,829,785	
* Bushels,	† Pounds,	Dozen.	
† Tons.	\$ Gallons.		

**POPULATION:**—White, 115,322; colored, 6,516; American born, 112,363; foreign born, 9,475; total, 121,838. Farm homes owned, 1,538; rented, 1,038; other homes owned, 6,099; rented, 11,599; total families, 20,274.

**FINANCE:**—County tax, 42 cents on one hundred dollars valuation; school tax from 10 cents to \$1.10, average, 40 cents; tax valuation, \$41,628,056; estimated to be one-half actual valuation. County indebtedness, \$220,000; township debt, \$15,000.

**TIMBER:**—All excepting a prairie strip of two to six miles upon the eastern edge, the county was originally a forest of walnut, maple, cottonwood, elm, sycamore, hackberry, and hickory. It is nearly all removed, excepting along the rougher places of Platte river and the Missouri river bluffs. Trees were of enormous size.

**MINERALS:**—Limestone is found along all the streams. It is used only locally. Some sand is taken from the Missouri river to serve building needs.

**LAND:**—Number of square miles, 420; acres, 268,800, of which 177,312 are included in improved farms. There are 2,584 farms of an average size of 90.3 acres, valued at \$16,123,380. Buchanan county comprises three soils and four topographies. Along the river is a wide stretch of alluvium, black, endless in depth,

*Photos in heading: Buchanan County Farm Scene; Residence of John Tootle.*

inexhaustible as grain land, and level. Bordering this is a high bluff, sometimes 250 feet above the valley, which graduates on the east into long rolling hill land and finally into prairie. Bluffs and hills are brown loam silt land, porous to great depth. This land is noted for drought resistance. It covers more than one-half of the county. On the east edge is the black prairie. Soil is two and one-half to five feet deep and very fertile. The average price of farms throughout the county is \$50 to \$70 an acre. In the immediate vicinity of St. Joseph, land for truck farming reaches an average of \$200 an acre. Land held principally by speculators ranges from \$150 to \$800 an acre.

**MANUFACTORIES:—**Are generally confined to St. Joseph. They include: woolen mills, harness and saddle factories, pump factories, flouring mills, wagon and buggy shops, cigar factories, roasted coffee and spice houses, baking powder, furniture and cooperage interests, hominy mills, clothing making establishments, creamery products, and meat packing houses.

**TRANSPORTATION:—**Being adjacent to St. Joseph and within thirty miles of Kansas City, transportation is necessarily advanced. Leading into St. Joseph are miles of first class rock and gravel roads.

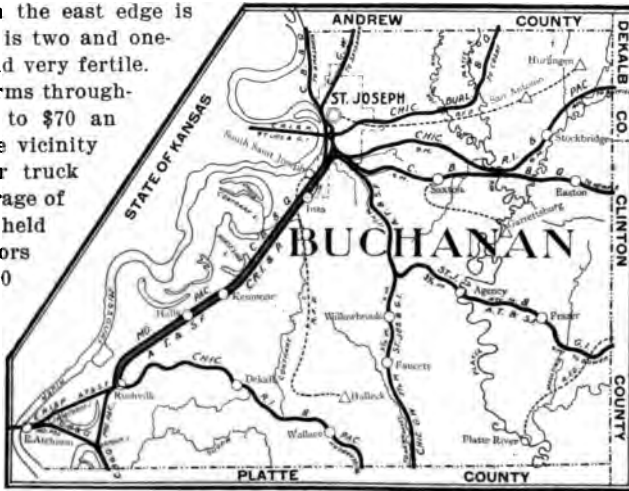
**SCHOOLS:—**The county system is one of the best organized in Missouri. Annual terms average seven to eight months. In St. Joseph schools are fostered with a favor characteristic of high class citizenship. Besides the public system are seventeen educational institutions, embracing kindergartens, academies, evening academic schools, parochial schools, commercial colleges, two medical colleges, a business university, and Christian Brothers College.

**SUMMER RESORTS:—**Suburban to the city of St. Joseph are five parks, with lakes and summer theatres and hotels. Lake Contrary is far-famed.

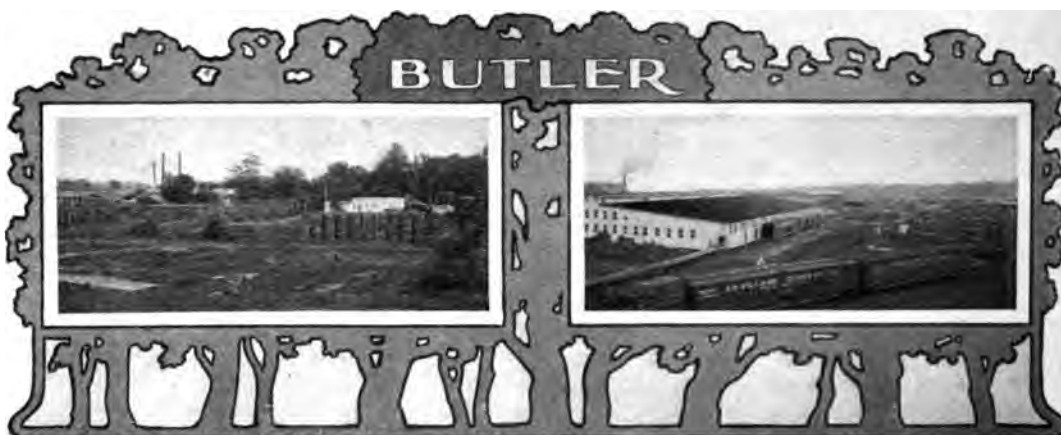
**CITIES AND TOWNS:—**St. Joseph; Rushville, population 412; Agency, 380; DeKalb, 362; Easton, 227. Small towns are supported by agriculture.

**NEWSPAPERS:—**Dailies: St. Joseph Gazette, News and Press, Volksblatt, Stock Yards Journal (Weeklies listed under St. Joseph); DeKalb Tribune.

Mo—22



THRO' THE LEAFY LANE.



**M**ANUFACTURING of hardwood timber products is of chief account in Butler county. It is situated upon Arkansas border, three counties west of the Mississippi river. Poplar Bluff, center of the county commercially and physically, is located upon the edge of the bluff which extends diagonally across Butler from northeast to southwest, making division between hill land northwest and lowlands southeast. Originally there was pine in the hills. In lowlands first operations began in 1886. New life was added in 1899, and to-day one company owns 93,000 acres of swamp lands, from which it is cutting oak, hickory, and gum wood. The last is largely exported in log and lumber; oak and hickory are locally consumed in the manufacture of barrels, oil well sucker rods, mine timbers, hubs, spokes, and tool handles. One-half commercial timber is removed.

As timber disappears lowlands become ready for irrigation and farming. The county contains 716 square miles, 450,240 acres, quite one-half of which is low, water-formed land. Improved farms, chiefly in hills, include 55,664 acres. Number of farms, 1,577, averaging 97.7 acres each; aggregate, actual value, \$2,745,914.

**LAND:**—Subject to homestead entry, 801 acres, in hills. One hundred and forty thousand acres of lowlands held for timber by mill men. Thousands of acres of this are "cut over" lands for sale at \$5 to \$9 an acre. Fifteen thousand acres of this character adjacent to Neelyville and Poplar Bluff are improved and bring \$20 to \$30. Forty acres cotton land adjacent Neelyville recently sold at \$50. Soil is of wide variance in productive quality. Hill land is deep cut with numerous creeks and by St. Francis and Black rivers. Valleys are cultivated; improved, they are worth \$15 to \$25 an acre. Four-fifths of hill land is rock covered. Seventy-five thousand acres may be bought at 50 cents an acre. Hill lands, best improved, bring \$20, largely in northwest quarter. Conservative estimate upon hill land is: five-eighths susceptible of farming; three-eighths too rough for plow, but good for other purposes.

**FINANCE:**—Poplar Bluff real property assessment basis, \$884,800; county tax, 75 cents; school tax, 25 cents to \$1.25; average, 75 cents; total assessed valuation, \$3,888,000; sixty per cent of real valuation; county debt, \$47,500; no township debt.

**POPULATION:**—White, 15,241; colored, 1,528; American born, 16,512; foreign born, 257; total, 15,769. Farm homes owned, 6,358; rented, 626; other homes owned, 636, rented, 1,196; total families, 8,816.

**MANUFACTORIES:**—Those interests in Poplar Bluff amount to one-sixth of land values in Butler county.

BUTLER COUNTY'S 1902 CROP			
	ACRES	NUMBER	VALUE
Corn	24,806	768,908 *	\$384,370
Wheat	2,109	43,635 *	25,745
Oats	1,248	31,200 *	10,400
Hay	5,501	8,250 †	90,750
Forage	1,100	1,285 †	6,425
Cotton	1,715	565,950 †	42,445
Tobacco	16	11,360 †	1,135
Potatoes	490	49,000 *	23,520
Vegetables	420		27,200
Total			\$516,050
LIVE STOCK AND PRODUCTS			
KIND	PRODUCT		VALUE
Cattle	9,166		\$ 206,235
Horses	3,265		196,900
Mules	1,180		70,800
Asses and Jennets	19		1,710
Sheep	1,324		3,972
Swine	20,910		209,100
Chickens	55,637		
Turkeys	907		30,665
Geese	1,925		
Ducks	2,227		
Swarms of Bees	1,101		2,050
Honey	36,700 †		4,588
Wool	3,630 †		605
Milk	982,630 \$		99,515
Butter	198,025 †		
Eggs	273,080 †		34,135
Total			\$559,355
* Bushels.	† Pounds.	Dozen.	
† Tons.	\$ Gallons.		

Photos in heading: Bimel-Ashcroft Manufacturing Co.; H. D. Williams Cooperage Company, Poplar Bluff.

Among the large individual interests are H. D. Williams Cooperage Co.; L. M. Palmer Lumbering Plant; Hargrove & Ruth Lumber Co.; Bimel-Ashcroft Manufacturing Co.; Hartzell Light & Mill Co., and a new handle factory. Cooperage company employing four hundred men, has daily capacity of 3,000 tight barrels. Operates line of cars and small steamboat line of Black river; mills in Missouri and Arkansas. Exports: custom is largely distilleries and cotton seed oil mills. Palmer plant employs 25 men, making coffee box and sugar barrel materials. Oak is quarter sawed; gumwood three-plied; operates log camps, over 90,000 acres in Butler county, Missouri, and 70,000 adjoining acres in Arkansas. Mill capacity, 150,000 feet daily. Hargrove & Ruth saw and plane hardwood timber. Men employed, 150; plant covers 16 acres; sawing capacity, 30,000 feet daily, piling and railroad ties extensively. Bimel-Ashcroft Manufacturing Co. makes spokes, six millions a year; employs 60 men; owns 20,000 acres of land. A handle factory has just been established, employing 35 men; small iron castings foundry; cold storage plant; bottling works; typewriter and adding machine factory; oil well supply factory, and patent lath plant make Poplar Bluff a manufacturing center. Hartzell Light & Mill Co. has a capacity of 175 barrels of flour, 125 barrels meal, and 1,000 sacks of corn chop daily. At Fisk a lumber company is located.

**TRANSPORTATION:**—Iron Mountain, St. Louis to Arkansas, 35.31; Cairo, Arkansas & Texas, 11.28; Doniphan Branch, 4.07; St. Louis, Memphis & Southeastern, 22.96.

**HIGH SCHOOL:**—Poplar Bluff; articulated with the University of Missouri; new, modern building with costly laboratories for physics and chemistry, and library.

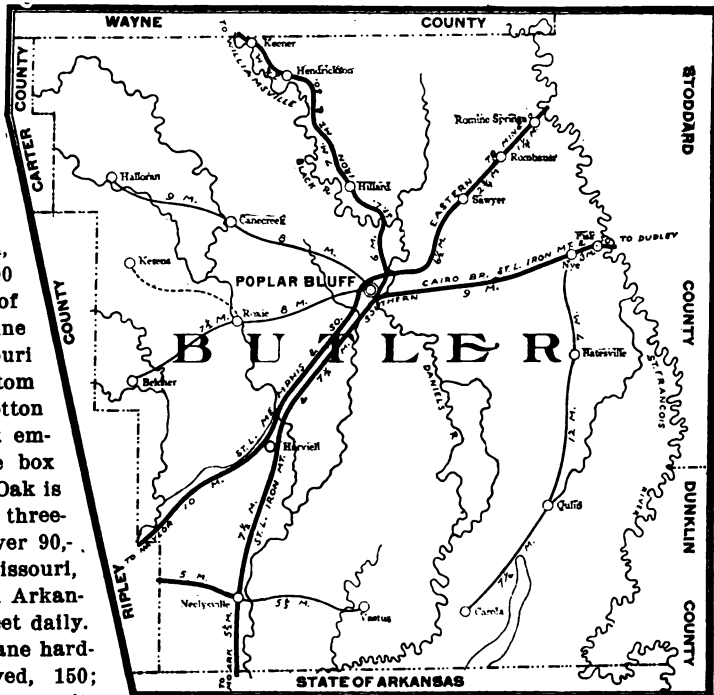
**GUN AND ROD:**—Deer, a few black bears, abundance of wild turkey and ducks, quail and squirrels. Black river and St. Francis river afford bass, crappie, cat fishing. A club house on St. Francis.



POPLAR BLUFF, ON BLACK RIVER.

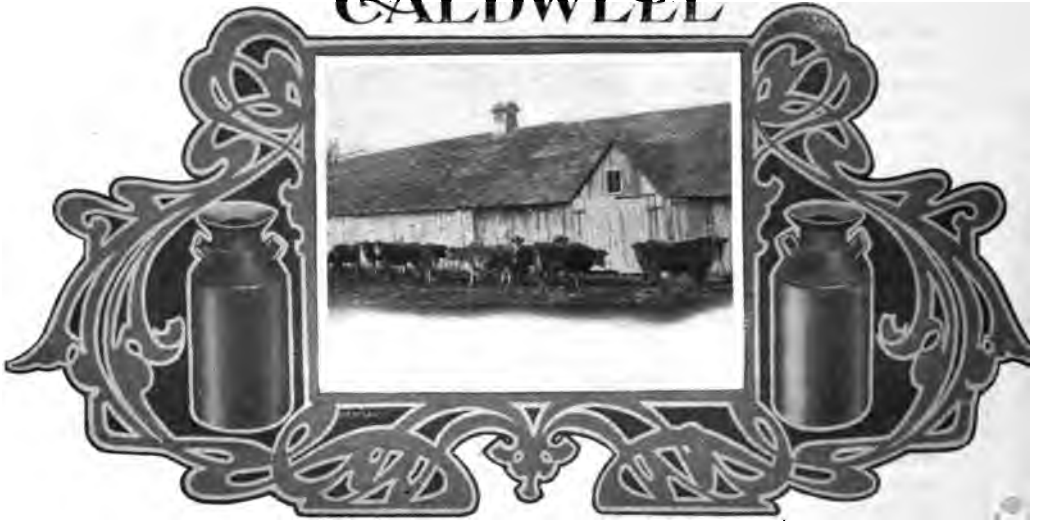
**TOWNS:**—Poplar Bluff, the "Miniature Pittsburg;" electric lights, waterworks, sewerage, \$8,000 city hall, fire department, Iron Mountain division point; Neelyville, Fisk.

**NEWSPAPERS:**—Poplar Bluff Citizen, Journal, Republican.





# CALDWELL



**C**ALDWELL is forty miles east of St. Joseph and sixty miles south of Iowa. Farming and live stock raising are characterizing industries, dairying and sheep raising being leading detail features. Chief products are corn, beef cattle, horses, hogs, hay and farm-made butter. Year by year live stock exportation increases as the corn and hay surplus figures decrease. County area is 430 square miles, 275,200 acres, of which the improved farms embrace 246,077. Farms number 2,329, averaging 118.9 acres, actually worth \$7,084,650.

**POPULATION:**—White, 16,226; colored, 430; American born, 16,184; foreign born, 472; total, 16,656. Farm homes owned, 1,628; rented, 644; other homes owned, 901; rented, 562; total families, 3,735.

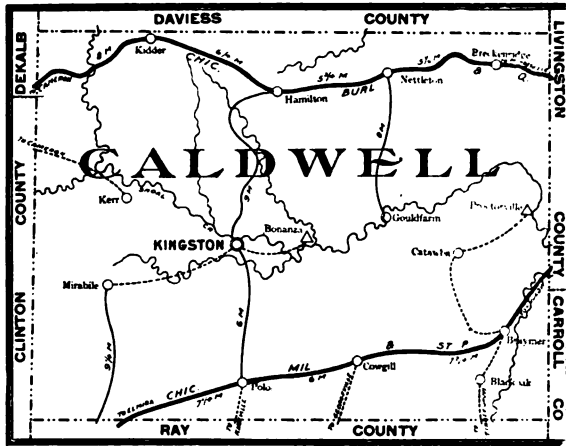
**COAL AND OIL:**—Coal underlies the entire county. Two miles east of Hamilton, two veins, one at 300 feet and the second seventeen inches thick at 507 feet depth, are yielding an oily, bituminous coal, highly inflammable and producing intense heat, used largely by Burlington passenger engines. Seventy-five men are employed. Oil drops from mine roofs. Bonanza Basin, embracing one-half, the central portion, of the county, bears striking oil prospects. Here and at Braymer, many acres of prospective oil land are now leased by local capitalists. Blue limestone of special firmness, near Kingston and Nettleton; sandstone, and a fire clay shale underlying coal, are important minerals, used only locally.

**CHARACTER AND PRICE OF LAND:**—One-third of Caldwell was originally timbered with large growth oaks, sycamore, cottonwood, elm, black walnut, and less important species. Its location was upon Shoal creek and tributaries and in the southwest one-twelfth part. Enough remains for local firewood and rough plank purposes. The little rough land is along the streams. It is seldom precipitous and never brings less than \$35 an acre. The two-thirds is high, rolling prairie. Within two miles of Hamilton best improved farms are selling at \$70 to \$80 an acre. Outside this district, not specially influenced by location, the values range from \$40 to \$65. Soil is invariably black, vegetable mould, fifteen to forty inches deep, with porous subsoil of clay. Products are widely diversified. Every farm has an orchard corresponding to family requirements.

CALDWELL COUNTY'S 1902 CROP			
	ACRES	PRODUCT	VALUE
Corn	94,644	4,826.84 *	\$1,529,455
Wheat	2,405	62,520 *	35,050
Oats	3,436	120,260 *	31,360
Hay	34,112	54,630 †	305,940
Forage	10,915	14,555 †	72,775
Broom Corn	98	53,000 †	1,480
Clover Seed		450 *	2,475
Grass Seed		3,200 *	4,960
Tobacco	14	12,600 †	1,200
Potatoes	687	89,311 *	21,390
Vegetables	515		28,110
Total			\$2,026,145
LIVE STOCK AND PRODUCTS			
KIND	NUMBER	VALUE	
Cattle	37,312	\$1,212,640	
Horses	11,013	734,200	
Mules	1,662	124,650	
Asses and Jennets	82	6,200	
Sheep	26,811	679,900	
Swine	67,990		
Chickens	145,561		
Turkeys	4,338	132,410	
Geese	2,303		
Ducks	1,688		
Swarms of Bees	2,115	5,435	
Honey	70,500 †	8,815	
Wool	136,510 †	23,085	
Milk	3,538,359 †	212,490	
Butter	371,657 †		
Eggs	820,500 †	103,315	
Total		\$3,392,510	
* Bushels.	† Pounds.	‡ Dozen.	
† Tons.	§ Gallons.		

Photo in heading: A Caldwell County Dairy Farm.

**DAIRYING:**—Dairy products are marketed in St. Joseph and Kansas City. Daily shipments are made from Hamilton, Kidder, Breckenridge, Nettleton, Braymer, Cowgill, and Polo, which are centers of as many districts. At Hamilton the dairy pay roll last year averaged \$2,306 a month. One farmer, owning 160 acres near Hamilton, receives \$80 a month for milk and cream. Cheese factory at Kidder and at Cowgill; flouring mills at Hamilton, Braymer, Breckenridge and Mirabile; canning factory at Hamilton; furniture factory at Breckenridge; brick and tile factory at Breckenridge and Braymer, are leading manufacturing interests.



**TRANSPORTATION:**—St. Joseph, Kansas City, St. Louis and Chicago are easily accessible. Track mileage is: Hannibal & St. Joseph, 30; Chicago, Milwaukee & St. Paul, 25. Both main lines, and touching fifteen of eighteen townships.

**SCHOOLS:**—Hamilton High School is approved by the University of Missouri. Its library embraces a thousand volumes. There are 79 school districts in the county, eight of which have modern brick buildings. Kidder Institute, with 167 enrolled, is a co-educational preparatory school, at Kidder.

The water is hard, filtered over limestone. Shoal Creek and its tributaries comprise the streams.

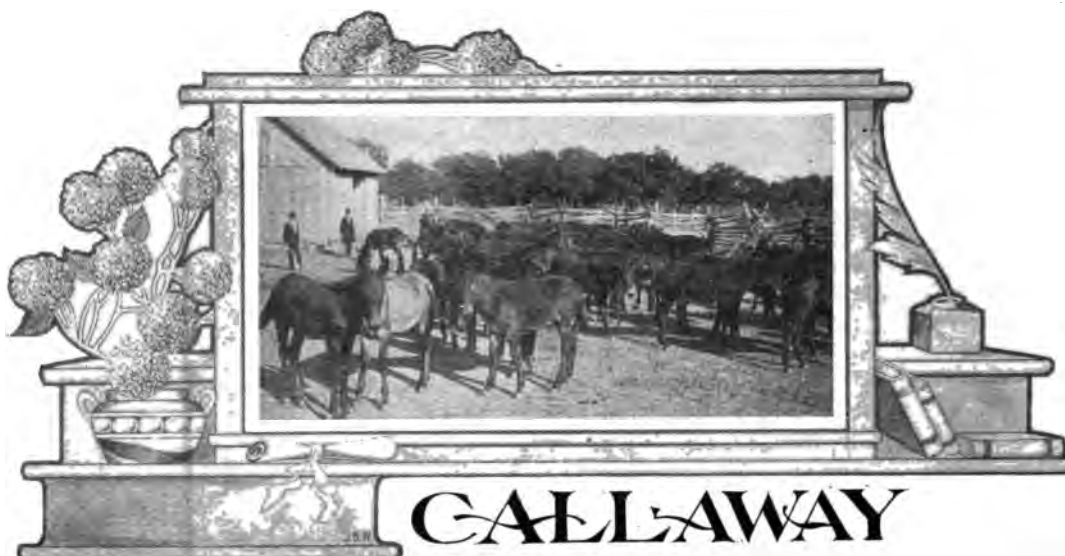
**TOWNS:**—Hamilton, largest town, has electric lights and telephone; Kingston, county seat; Braymer, Breckenridge, Polo, Cowgill, Kidder and Nettleton, are agricultural towns.

**NEWSPAPERS:**—Hamilton Hamiltonian, Farmers' Advocate; Braymer Bee, Comet; Breckenridge Bulletin; Cowgill Chief; Polo Vindicator, News.

**FINANCE:**—County tax, 40 cents; school tax, from 10 cents to \$1.15; average, 47 cents; total assessed valuation, \$6,931,924; assessed valuation per cent of real valuation, 35; no county debt; no township debt.



A MISSOURI MULBERRY.



**C**ALLAWAY is a county of schools and of general agriculture and live stock breeding. It is long established and far advanced in the development of church, school and farm. It is upon the north side of the Missouri river, four counties west of the Mississippi. At Fulton, county seat, is Westminster College, one of the first colleges of the West, Synodical College for young women, William Woods College for young women, Missouri School for the Deaf, and a high school of approved grade. Big mules are a notable production of Callaway county farms. Nineteen thousand horses and mules are in the county, to the worth of one and one-fifth million dollars. This means a total value of a fraction over five horses and mules for every farm in the county. The greatest product is corn, \$1,201,035 a year. Cattle values are second in amount. Callaway county contains 760 square miles of land.

CALLAWAY COUNTY'S 1902 CROP			
	ACRES	PRODUCT	VALUE
Corn	87,770	4,171,805 *	\$1,201,035
Wheat	26,650	669,250 *	366,440
Oats	10,653	383,510 *	101,630
Hay	49,005	78,410 †	501,825
Forage	2,430	3,040 †	15,200
Flax	24	144 *	145
Broom Corn	19	9,500 †	260
Clover Seed		1,350 *	7,560
Grass Seed		90 *	160
Tobacco	139	97,300 †	9,245
Potatoes	982	115,960 *	37,105
Vegetables	1,460		66,615
Total			\$2,307,220
LIVE STOCK AND PRODUCTS			
KIND	NUMBER	VALUE	
Cattle	32,913	\$1,069,675	
Horses	12,554	896,935	
Mules	6,314	473,550	
Asses and Jennets	395	41,875	
Sheep	40,191	133,970	
Swine	47,567	476,670	
Chickens	202,276		
Turkeys	8,464	177,300	
Geese	9,316		
Ducks	1,486		
Swarms of Bees	2,943	6,060	
Honey	98,900 †	12,260	
Wool	150,560 †	25,090	
Milk	2,854,182 ‡		
Butter	464,201 †	211,270	
Eggs	1,075,960 †	134,480	
Total		\$3,599,135	
* Bushels.	† Pounds.	‡ Dozen.	
† Tons.	§ Gallons.		

**POPULATION:**—White, 21,880; colored, 4,104; American born, 25,431; foreign born, 553; total, 25,984. Farm homes owned, 2,699; rented, 831; other homes owned, 743; rented, 882; total families, 5,155.

**FINANCE:**—County tax, 60 cents on one hundred dollars valuation; school tax average, 49 cents; total assessed valuation, \$7,301,814; assessed valuation is equal to forty per cent of actual valuation. County debt is \$55,000. No township indebtedness.

**TIMBER:**—There are twenty thousand acres of timbered land at present, scattered along the streams, and mainly in the southern half of the county. It consists of black oak, white oak, elm, sycamore, cottonwood, poplar, soft maple.

**MINERALS:**—Coal, fire clay and white sand are commercially utilized. The first two minerals are mined in the vicinity of Fulton. Coal formation underlies the entire county. The vein is thirty inches thick and is found at surface to thirty-foot depth. Annual output is 23,483 tons. About one hundred miners are employed in winter season. One mile south of Fulton fire clay and coal are taken from the same shaft, which is thirty feet deep.

**LAND:**—There are 486,400 acres, of which 340,989 are in a high state of agricultural development. Number of farms, 3,585; average size, 135 acres; valued at \$9,087,251. There are four characters of soil: level

*Photo in heading: Preparing Callaway Mules for the Markets.*

prairie loam, common to northeast Missouri; brown loam loess, of the kind which characterizes the bluffs of the Missouri river; alluvial soil, the deposit of the river; red limestone clay, moderately flinty, as found in the Ozark mountain border. The first soil is common to three-fourths of the county. The alluvium borders the river. Loess bluffs join the bottom land at all points except in the southeast corner, where is a small strip of clay. In the latter place white oak grows, and the land is rough; farms are selling at from \$5 to \$20. Elsewhere timbered farms sell at \$20 to \$40 an acre, and original prairie farms are available at \$35 to \$50 an acre.

**MANUFACTURES:**—Fire clay and kaolin products are manufactured extensively. There is an iron foundry at Fulton, and flouring and feed mills operate in a small way in different points of the county.

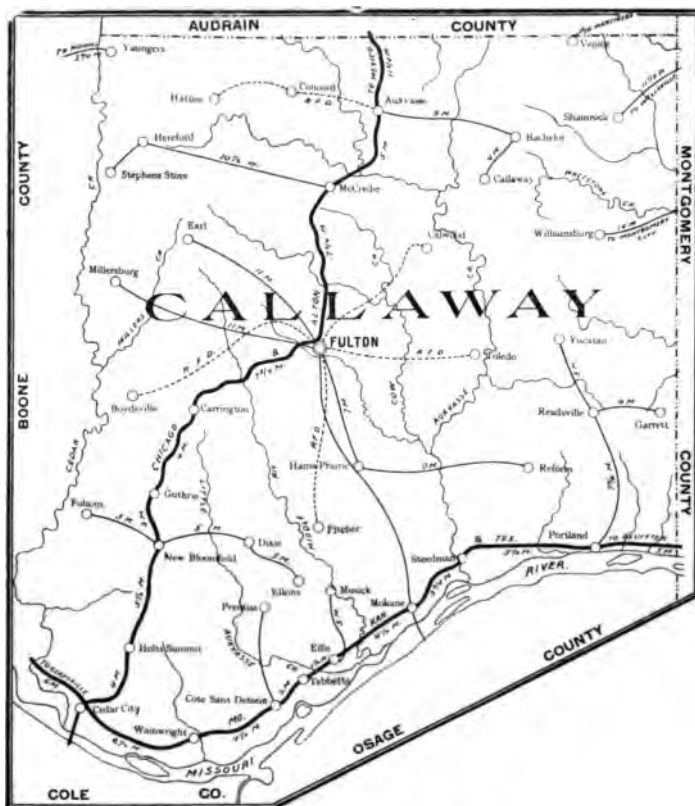
**SCHOOLS:**—Westminster College, for men, established 1853, now under joint care of Southern and Northern Presbyterian Synods of Missouri; campus of eighteen acres; main buildings, Westminster Hall, the Chapel, Science Hall, and Reunion Hall. Libraries are among the best. Athletics, literary work, and Y. M. C. A. fostered. Synodical College, for women, under Presbyterian auspices, and William Woods College for young women, under auspices of the Christian church, are first grade boarding schools.

**TRANSPORTATION:**—Chicago & Alton, main line and branch, 41.20; Missouri, Kansas & Texas, 35.40 miles.

**CHURCHES:**—There are eighty-three in the county.

**TOWNS:**—Fulton, population 4,883; besides three colleges, it has State hospital for Insane Number 1, and Missouri School for Deaf. This town has macadamized streets, waterworks, sewerage system, electric lights. Monthly stock sales are a feature of commercial importance. They are attended widely. Mokane, population 331; Cedar City, 287; and Auxvasse, population, 337, are the other incorporated towns. All are live stock centers, live stock shipping points, and are supported by agricultural interests of their respective localities.

**NEWSPAPERS:**—Fulton Missouri Telegraph, Sun, Gazette, Twentieth Century, Journal; Cedar City Reporter-Chronicle; Mokane Herald-Post; Auxvasse Review; New Bloomfield News.



# CAMDEN



**C**AMDEN is located in south-central Missouri, 40 miles southwest of Jefferson City. It is concerned chiefly in production of railroad ties. In quantity produced it leads the State. Originally ninety-seven per cent of its 692 square miles of mountainous surface was a dense forest, from which but one-third commercial white oak has been removed. Ha Ha Tonka Springs, seven miles south of Linn Creek, on Niangua river, is a second feature of character. Of 442,880 acres

of land, but 82,857 is in a state of cultivation. There are 2,069 farms, embracing, in lands for cereal production, pasture and firewood purposes, an average of 137.4 acres. Cattle, horses, mules, and hogs, raised largely upon free range, aggregate in value one million dollars.

**POPULATION:**—White, 13,018; colored, 95; American born, 12,973; foreign born, 140; total, 13,113. Farm homes owned, 1,458; rented, 615; other homes owned, 181; rented, 333; total families, 2,587.

**FINANCE:**—County tax, 47 cents; school tax, average, 39 cents; assessed valuation, \$2,048,189; sixty-six and two-thirds per cent of actual valuation. No county debt. No township debt.

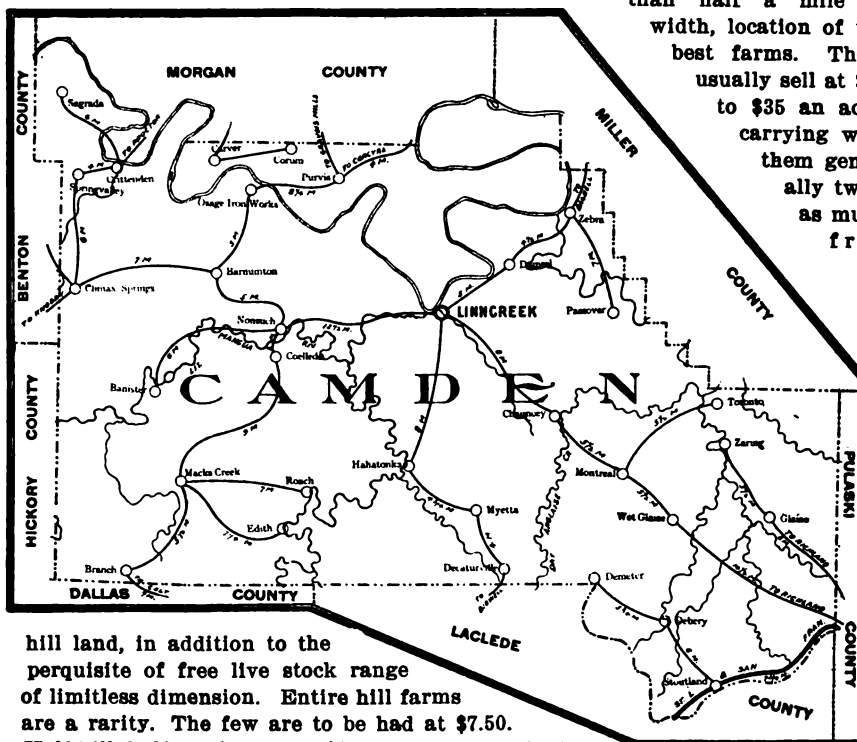
**TIMBER:**—Comprises white oak, post oak, hickory, black-jack, and, along streams, scattering elm, linwood, ash, sycamore, and hackberry varieties. White oak railroad ties bring twenty-eight cents. Every farmer is engaged in their manufacture, cut mainly from land adjacent Osage and Niangua rivers, rafted to Bagnell and there loaded upon railroad cars.

**MINERALS:**—Iron abounds. Kaolin deposits are large. A crystalline substance resembling onyx exists in large quantities in caves near Ha Ha Tonka Springs and near Barnumton. No mines.

**LAND—TOPOGRAPHY AND PRICE:**—Wholly mountainous. The main range is five hundred to seven hundred feet above corresponding valleys. Four-fifths is wild land, which can be bought for \$3 to \$10 an acre. The Osage river winds about through the entire northern part for sixty miles. Main tributaries are Niangua, Little Niangua, and Grand Auglaise rivers. Bordering all streams, upon one side, is the inevitable valley, less

CAMDEN COUNTY'S 1902 CROP			
	ACRES	PRODUCT	VALUE
Corn	84,283	1,803,754 *	\$ 384,310
Wheat	9,055	172,045 *	94,625
Oats	3,517	105,510 *	27,950
Hay	10,250	15,385 †	100,005
Forage	1,140	1,425 †	7,125
Flax	10	60 *	60
Broom Corn	28	13,000 †	360
Tobacco	39	27,300 †	2,596
Potatoes	489	61,125 *	19,560
Vegetables	810		35,305
Total			\$671,895
LIVE STOCK AND PRODUCTS			
KIND	NUMBER	VALUE	
Cattle	14,225	\$ 391,190	
Horses	4,953	297,180	
Mules	1,207	78,455	
Asses and Jennets	83	2,970	
Sheep	10,275	80,825	
Swine	21,753	217,540	
Chickens	53,626		
Turkeys	1,181		
Geese	2,967	39,510	
Ducks	1,467		
Swarms of Bees	447	1,255	
Honey	14,300 †	1,865	
Wool	27,830 †	4,640	
Milk	1,295,400 †	79,890	
Butter	377,990 †		
Eggs	383,510 †	47,940	
Total		\$1,193,340	
* Bushels.	† Pounds.	Dozen.	
† Tons.	\$ Gallons.		

Photos in heading: Near Ha Ha Tonka Springs; Stalagmites in River Caves.



than half a mile in width, location of the best farms. These usually sell at \$25 to \$35 an acre, carrying with them generally twice as much free

hill land, in addition to the perquisite of free live stock range of limitless dimension. Entire hill farms are a rarity. The few are to be had at \$7.50.

Half hill, half creek bottom, \$20 per acre. Residents own nearly all the land. Soil varies from first class black, water deposit composition in the river bottoms, to rocky clay in the hills. Blue stem grass grows wild.

The Frisco railroad cuts across southeast corner, and has six miles of track therein. Wagon roads follow ridges or valleys, and profit from Nature's graveling. Small boats occasionally ply the Osage and Niangua rivers and afford transportation for railroad ties.

**SUNDAY SCHOOLS:**—Total number, forty-two. Linn Creek has Methodist and Christian churches, each supporting its Sunday School. In rural districts religious services are held in school houses.

**CONCRETE SCHOOL HOUSES:**—Rural district school buildings are frequently concrete construction. Floors are of hardwood and roofs of sheetiron or rough boards. Material is at hand; labor contributed. Concrete proves warm in winter and cool in summer.

**HA HA TONKA SPRINGS:**—Reached by overland drive from Lebanon, on the Frisco; or from Bagnell, on the Missouri Pacific railroad; is a summer resort of some consequence. Spring of clear water flows from ground in volume sufficient to supply St. Louis. A summer hotel accommodates less than fifty guests; and many parties camp at the spring, or upon the Niangua river, which affords the angler striped and black bass, jack salmon, buffalo, catfish, carp, and other fish. Arnhold's Mill and Climax Springs are other favorite camping places for summer visitors. Wild turkeys, squirrels, deer, quail and, occasionally, beavers are killed. Mountain scenery is further enchantment.

Linn Creek is county seat.

**NEWSPAPERS:**—Linn Creek Reveille, News; Mack's Creek Rustic.



RAISING ANGORA GOATS IS PROFITABLE.



**C**APE GIRARDEAU is one hundred miles south of St. Louis. It is one of the old settled, wealthy counties of southeast Missouri, and owes its prestige to agriculture, schools and to the fact that it has long been the freight distributing point for a large area. It borders Missouri's delta lands on the south and the Mississippi river on the east. Heretofore freight has come chiefly by boat to the landing at Cape Girardeau, the largest town. Within the present year the St. Louis and San Francisco railroad has finished a line which parallels the Mississippi river from St. Louis to Cape Girardeau, adding further freight importance to the latter city, which has also

been made the railroad division point. Wheat is the leading agricultural product. Corn, horses and mules, cattle, hogs, a high grade flour, railroad rock ballast and stone for the United States government river improvement are important sources of revenue. Land surface measures 540 square miles, 340,600 acres, of which 211,544 acres are in improved farms to the number of 2,576. Farms average in total acreage of tillable, pasture, and other lands, 135.5; actual aggregate value \$6,041,725.

**TIMBER:**—Originally a heavy growth of timber, in great variety, grew. White, red, black, post, and burr oak; gumwood, yellow poplar, black walnut, sycamore, ash, hickory, sassafras, and mulberry were prominent varieties. Sixty-five per cent is now removed, leaving only red gum, or satin walnut, ash and white oak in commercial quantity.

**MINERALS:**—Kaolin, crystal sand and limestone. Two mines of kaolin, one at Jackson and the second between Jackson and Cape Girardeau are worked to profit. Crushed rock for railroad and river work is a large industry base. Crushers are at work along the giant limestone bluffs, which guard against the Mississippi's encroachment. Sand is imbedded in rock form. It easily disintegrates. Sand lands are available at \$15 to \$30 per acre.

**LAND:**—Chiefly hill land, though embracing thirty

*Photo in heading: State Normal School, Cape Girardeau, District No. 3.*

#### CAPE GIRARDEAU COUNTY'S 1902 CROP

	ACRES	PRODUCT	VALUE
Corn	38,230	1,242,150 *	\$ 465,805
Wheat	71,810	1,074,125 *	633,890
Oats	7,958	230,725 *	76,910
Hay	18,044	27,035 †	324,420
Forage	2,515	2,925 †	14,675
Broom Corn	14	7,000	195
Clover Seed		780	4,015
Grass Seed		75	165
Tobacco	19	13,490	1,350
Potatoes	810	64,060 *	30,745
Vegetables	720		37,645

Total | | \$1,589,805

#### LIVE STOCK AND PRODUCTS

KIND	NUMBER	VALUE
Cattle	15,770	\$ 394,259
Horses	6,875	412,500
Mules	3,205	208,325
Asses and Jennets	70	6,340
Sheep	9,221	27,663
Swine	35,691	356,910
Chickens	101,913	
Turkeys	4,910	97,913
Geese	6,616	
Ducks	1,909	
Swarms of Bees	2,073	3,620
Honey	69,100 †	8,338
Wool	45,090 †	7,665
Milk	2,009,604 †	180,115
Butter	289,150 †	
Eggs	488,210	61,025

Total | | \$1,764,954

\* Bushels. † Pounds. ‡ Dozen.  
† Tons. ‡ Gallons.

thousand acres of Mississippi river bottom and nineteen thousand acres of lowlands, the latter lying south of the old Cape Girardeau-Bloomfield rock road, which marks the bordering bluffs. Twenty-six thousand acres of bottom lie in one body, a few miles down the river from the city of Cape Girardeau. The soil is Mississippi river deposit black and fertile of age. One-third of this is second, improved bottom land, worth \$35 to \$45; remainder is unimproved, worth \$20 to \$30. Four thousand acres of same lie in one body upon the river at a point due east of Jackson; prices are same. Strip of lowlands described average \$20 an acre in price. Soil is a mixture of black loam and clay marl to endless depth. Land is generally unimproved. Sawmills are rapidly converting these forests into farms. Uplands are light clay loam where thrive yellow poplar, pawpaw and mulberry. Eight per cent are to be had at \$15; twenty-five per cent at \$15 to \$30; fifty per cent at \$35 to \$40; fifteen per cent at \$50 to \$60; and the remaining two per cent, adjacent to Jackson and Cape Girardeau, average \$60 to \$70 per acre.

Land tracts in lowlands are much larger than elsewhere. Limestone bluffs are frequently 300 to 400 feet high along the Mississippi and bordering the lowlands. Estimated 6,000 acres bluff land herein bearing stone at four cents per cubic foot.

**POPULATION:**—White, 22,327; colored, 1,988; American born, 22,977; foreign born, 1,338; total, 24,315. Estimated German and German descent, fifty per cent. Cape Girardeau was originally a French settlement. Farm homes owned, 2,032; rented, 603; town homes owned, 1,101; rented, 1,163; total families, 4,899.

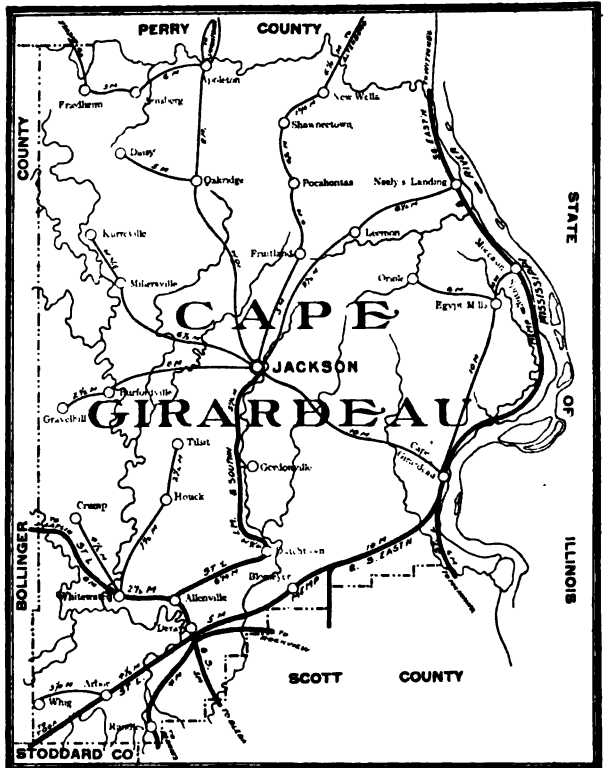
**FINANCE:**—County tax, 35 cents; school tax, from 10 cents to \$1; average, 44; total assessed valuation, \$6,427,056; assessed valuation per cent of real valuation, 40 per cent. No county debt; township debt, \$108,000.

**MANUFACTURES:**—Flour, rock ballast, pressed brick, staves, barrel headings, hardwood lumber, wagon spokes and hubs, bent wood products, ice, kaolin powder and shirts are made. Nine flour mills are located here; two at Jackson; two at Cape Girardeau; one each at Oak Ridge, Bufordsville, Pocahontas, Millersville and Arnsberg.

**RAILROADS, STEAMBOATS AND TURNPIKE ROADS:**—Iron Mountain and Frisco, main lines and branches, afford outlet to main towns, the latter making Cape Girardeau a leading railroad and distributing point. Three lines of steamboats give freight service. Turnpike roads connect Cape Girardeau, Jackson, and Bufordsville; and Cape Girardeau and Scott county, a total of thirty miles.

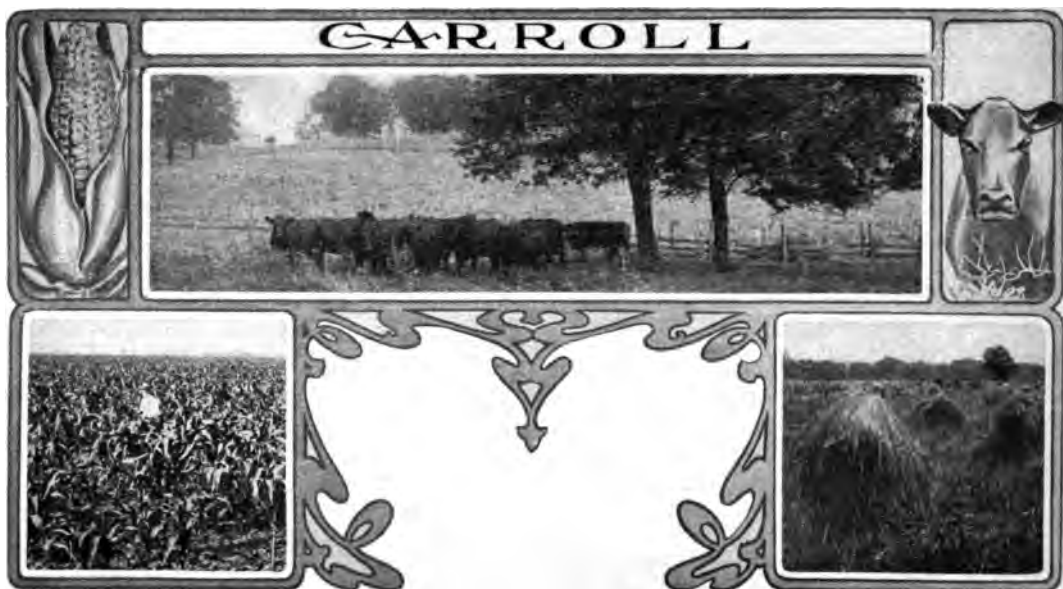
**SCHOOLS:**—State Normal School, for teachers, established 1873, at Cape Girardeau; free tuition; psychology and pedagogy, mathematics, sciences, history, languages, manual training, elocution, vocal music, political economy; library of three thousand volumes; students, 363. Jackson and Cape Girardeau have high schools approved by University of Missouri. A military academy at Jackson, for boys, and St. Vincent's School, for girls, are at Cape Girardeau.

**NEWSPAPERS:**—Cape Girardeau Progress, Democrat, Republican; Jackson Cash Book, Herald, Volksfreund.



JAPANESE  
WALNUTS.





**C**ARROLL has a larger acreage of Missouri river bottom land than any other county in the State; and Missouri river bottom is as famous for fertility as the Valley of the Nile. Naturally does it follow, then, that for feeding four million dollars worth of live stock, Carroll county farmers produce an aggregate of \$2,710,200 worth of corn. North of the alluvial soil lies a belt of brown loam loess land ideally adapted to fruit growth. Barrels of apples grown here are shipped to Europe. The balance of the land is prairie, soil of blackest hue, where are located many of the fine livestock farms, for which the county is also noted. Some coal is mined within the county. Manufacturing is carried on to considerable extent, and a manufacturers' aid association at Carrollton offers inducement to further manufacturing.

**POPULATION:**—White, 25,123; colored, 1,332; American born, 25,657; foreign born, 798; total, 26,455. Farm homes owned, 2,407; rented, 1,165; other homes owned, 1,204; rented, 907; total families, 5,683.

**FINANCE:**—County tax, 40 cents on one hundred dollars valuation; school tax averages 46 cents; total assessed valuation, \$10,111,364; farms are assessed at 25 per cent of actual valuation, and town lots upon a basis of one-third. No indebtedness.

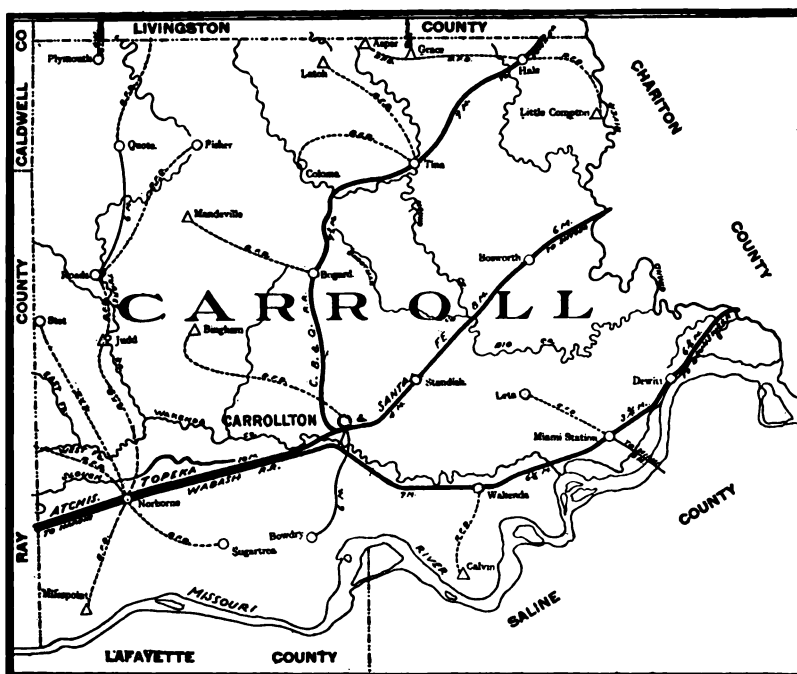
**TIMBERS:**—Formerly there was an abundance of cottonwood, elm, black oak, hazel, walnut, hickory and sugar tree timbers. There is now no commercial quantity of any kind.

**MINERALS:**—Annual production of coal amounts to approximately two thousand tons. It is locally consumed. It is the same seam worked in Ray county, overlaid with a roof which avoids the necessity of timbering, but lack of railroad facilities at the particular locality, retards in this regard the development of the section.

**LAND:**—Three topographies; three soils; three prices. Along the Missouri and Grand rivers are broad belts of alluvial lands, embracing almost one-third of the county. This land is devoted chiefly to the production of corn and other cereals. Soil is inexhaustible, known to be in some places fifty feet thick. Generally it contains sand in desirable proportion and

CARROLL COUNTY'S 1902 CROP			
	ACRES	PRODUCT	VALUE
Corn	148,342	8,609,896 *	\$2,710,200
Wheat	21,657	641,080 *	368,620
Oats	9,053	298,750 *	77,675
Hay	44,224	88,450 †	495,320
Forage	4,855	6,475 †	32,375
Flax	21	240 *	250
Broom Corn	23	12,650 †	350
Clover Seed		560 *	3,080
Grass Seed		10,500 *	16,275
Tobacco	248	223,200 †	22,820
Potatoes	1,544	185,280 *	44,470
Vegetables	1,125		52,060
<b>Total</b>			<b>\$3,822,995</b>
LIVE STOCK AND PRODUCTS			
KIND	NUMBER	VALUE	
Cattle	39,814	\$1,287,455	
Horses	14,325	935,000	
Mules	5,227	392,025	
Asses and Jennets	96	9,600	
Sheep	9,504	81,680	
Swine	78,831	788,310	
Chickens	214,863		
Turkeys	5,598	185,100	
Geese	4,732		
Ducks	3,596		
Swarms of Bees	2,748	5,770	
Honey	91,600 †	11,450	
Wool	44,475 †	7,410	
Milk	3,309,164 †	185,580	
Butter	625,994 †		
Eggs	1,181,600 †	147,700	
<b>Total</b>		<b>\$4,007,080</b>	
* Bushels.	† Pounds.	Dozen.	
† Tons.	§ Gallons.		

Photos in heading: Carroll County Farm Views.



sells at \$85 an acre. A small acreage lacking sand and therefore less productive, may be bought at \$40 an acre. Something over one-third of the county is embraced in the character of land which is next encountered from the rivers. It is land of silt formation, porous to great depths and sustaining a top soil of splendid fertility. This upland, together with 100,000 acres of black soil prairie in the northwest corner of the county, comprises the balance of the county. Its farms are finely improved and are largely devoted to the breeding of live stock. Carroll county embraces 690 square miles of land surface, 441,600 acres, of which 371,073 acres are included in improved farms. Farms number 3,692, of an average size of 113.6 acres. The aggregate valuation of the farms is, according to present selling price, \$12,769,029.

**MANUFACTURES:**—Farm wagons and buggies, haying machinery, brick and tiling and cigars are manufactured. There are two wagon factories which sell well-built jobs throughout Missouri and southern Iowa. Two brick and tile factories employ a large number of men and sell tile in markets adjoining the rivers of the State. Creamery products are made in a small way.

**TRANSPORTATION:**—Wabash main line, Kansas City to St. Louis, crosses the county at the south side; Santa Fe parallels the Wabash; and Chicago, Burlington & Kansas City leaves Carrollton in a northerly direction.

**SCHOOLS:**—Public school system of eminently high grade. Norborne and Carrollton high schools are approved by the State University.

**TOWNS:**—Carrollton, county seat, population, 3,854; Norborne, 1,189; DeWitt, 550; Hale, 665; Bosworth, 401; Tina, 368; Wakenda, 329; Bogard, 276, are the incorporated towns.

**MINERAL SPRINGS:**—Two near Carrollton.

**NEWSPAPERS:**—Carrollton: Democrat, Republican-Record; Norborne Democrat, Leader, Jeffersonian; Tina Herald; Bosworth Star-Sentinel; Hale Hustler, Leader; DeWitt Farmers' Herald; Bogard Dispatch.



GATHERING THE GOLDEN GRAIN.



**T**IMBER and natural scenery command in Carter county. The surface is mountainous, at one time covered by unbroken forests of pine and hardwoods. County is situated second above the Arkansas border and is the fifth west of the Mississippi river. One of the largest yellow pine mills in Missouri is located at Grandin, within the county. Railroad ties of white oak are shipped to the extent of 350,000 a year. Current river, flowing south through center of county, furnishes the transportation, and gives rise to Carter's just claim to picturesqueness. Club houses are

located along this stream. Fishing, hunting, cave exploring, boating and bathing attract summer camping parties. Commercial orcharding is to come. One orchard at Hunter has two hundred and fifty acres, and one at Elsinore a hundred.

**POPULATION:**—White, 6,702; colored, 4; American born, 6,651; foreign born, 55; total, 6,706. Farm homes owned, 373; rented, 182; other homes owned, 216; rented, 514; total families, 1,285.

**FINANCE:**—County tax, 45 cents on one hundred dollars; school tax, from 30 cents to \$1.35; assessed valuation, \$1,648,483; assessed valuation per cent of actual value, improved lands, 40; wild lands are assessed at \$1.25 an acre; no county debt; no township debt.

**TIMBER:**—Mainly pine, white oak, black oak, hickory. Pine lands cut an average of 4,000 feet per acre. They are largely cut over. There are ten sawmills, largest at Grandin.

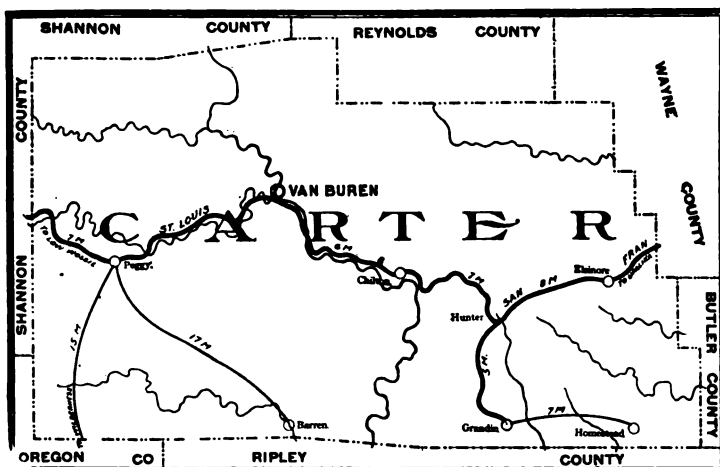
**MINERALS:**—Iron ore exists in eastern and western border strips of six miles width east. Near Elsinor, Chilton and McDonald it is most evident. Lead and copper traces have been found.

**LAND:**—County area, 500 square miles, equal to 320,000 acres, of which 22,873 acres are cultivated. Number of farms, 554, average size, 115.7 acres, including land of various characters. Actual aggregate value, \$1,793,959. Surface embraces three distinct types

CARTER COUNTY'S 1902 CROP			
	ACRES	PRODUCT	VALUE
Corn	10,756	288,900 *	\$100,825
Wheat	1,511	21,755 *	12,480
Oats	678	20,190 *	6,730
Hay	1,802	2,405 †	28,840
Forage	720	840 †	4,200
Tobacco	18	9,230 †	525
Potatoes	173	15,916 *	7,640
Vegetables	180		8,395
Total			\$170,055
LIVE STOCK AND PRODUCTS			
KIND	NUMBER	VALUE	
Cattle	4,694	\$ 105,705	
Horses	1,000	60,000	
Mules	680	37,800	
Asses and Jennets	10	900	
Sheep	680	1,890	
Swine	11,440	114,400	
Chickens	15,789		
Turkeys	190		
Geese	688	9,260	
Ducks	662		
Swarms of Bees	416	921	
Honey	13,867 †	1,733	
Wool	1,990 †	332	
Milk	402,410 ‡		
Butter	77,225 †	32,030	
Eggs	105,300 †	13,150	
Total		\$378,121	
* Bushels.	† Pounds.	‡ Dozen.	
† Tons.	§ Gallons.		

*Photos in heading: On Current River; Yellow Pine Mills at Grandin.*

of land: first, hill land, in many places mountainous; second, flatwoods; third, river and creek bottoms. Of the first class seventy-five per cent is rocky. It is estimated that more than one-half of entire county is thus too rough for the plow. Soil is clay. Eighty-seven thousand acres of this land sold within the past year for \$1 an acre, pine timber having been removed. Much of it may be had at 25 cents an acre. It is adapted to fruit tree growth. Hills are less steep in eastern part of



county, growing larger to the northwest. Second division includes one hundred square miles of high flat pine woodland around Hunter; wheat and hay land. Thirdly, the river bottom land is black loam, corn soil. Here are found the farms, worth \$10 to \$15 an acre, when improved; unimproved, \$5 an acre. Farm improvements are best near Van Buren and Hunter. Cleared land within one mile of Van Buren may be bought for \$10. It is in good state of cultivation.

**MANUFACTORIES:**—At Grandin, a lumber company operates a mill with 285,000 feet sawing and 200,000 feet daily planing capacity; 1,211 men employed in woods and various mill departments; annual production, 75,000,000 feet; 110,000 acres uncut land; 14 drying sheds; 40 acres piled with stock lumber; electric lights, hospital, hotel, store, library, depot, sixty miles company telephone. Van Buren has two small sawmills and grist mill; Elsinore a sawmill.

**TRANSPORTATION:**—St. Louis, Memphis and Southeastern, 11.80; Frisco (Current river route), 35.67 miles taxed road.

**CHURCHES:**—Grandin has Baptist, Methodist, Congregational, Unitarian and Catholic; Van Buren, Baptist and Methodist. Elsinore, two church organizations.

**CHURCHES:**—Grandin has Baptist, Methodist, Congregational, Unitarian and Catholic; Van Buren, Baptist and Methodist. Elsinore, two church organizations.

**FISHING AND HUNTING:**—Two permanent club houses have been erected upon Current river. One of these places is open the year 'round, proving Carter county both a summer and a winter resort. A number of caves filled with Missouri onyx are found along Current river. Bass, salmon and game fish of other kinds are gigged and hook-caught from clear water of Current river. Deer, wild turkeys, and small game killed in mountains.

**Towns:**—Grandin, purely a sawmill town, entire population employed in local mill. Van Buren, county seat, situated in Current river valley, surrounded on two sides by high mountains, is farming center; Elsinore, sawmill town and fruit market; Hunter, junction for railroads.

**NEWSPAPERS:**—Van Buren Current Local.



SHAVINGS ARE CARRIED AWAY BY MACHINERY AND LATER ARE BURNED.



**C**ASS is great in the production of corn and hay, in cattle, horses, mules and hogs. Its proximity to Kansas City makes it also prominent in dairying. Commercially it is a double-centered county. Pleasant Hill, towards the northeastern part of Cass county, is the largest town, draws from a large territory and has important commercial interests among which is a nursery and greenhouse, one of the most extensive in Missouri. At the center of the county is Harrisonville, county seat, almost as large as Pleasant Hill, with the advantages of a first class railroad center. Railroads approach this city from eight different directions. Cass is twenty miles south of Kansas City, and is upon the Kansas line. Corn and cattle products amount annually to more than \$1,000 for every farm in the county. Corn product exceeds the two million dollar mark, and there are more than one and one-third million dollars worth of cattle. Horses and mules also rise above the million dollar mark. County embraces 688 square miles of land surface, mostly undulating prairie.

**POPULATION:**—White, 23,044; colored, 592; American born, 23,229; foreign born, 407; total, 23,636. Farm homes owned, 2,007; rented, 1,164; other homes owned, 1,293; rented, 833; total families, 5,297.

**FINANCE:**—County tax, 30 cents on one hundred dollars valuation; school tax from 20 cents to \$1.70, average, 46 cents; total assessed valuation, \$9,735,198; assessed valuation is estimated at one-third the actual valuation. County debt, \$570,000; township debt, \$364,000.

**TIMBER:**—Timber was confined to the streams. It consisted of oak, elm, walnut, hickory, sycamore. Commercial timber exhausted.

**MINERALS:**—At Creighton, in the south central part of the county, a coal mine was opened in 1896 and mined one thousand tons that year. The output gradually increased until 1900 when, because of refusal to comply with State regulations, the mine was ordered closed. The quality of product is good. Shaft is 156 feet deep. A tram road half a mile in length connects it with railroads. Clays of various compositions are found throughout the county, and limestone of a good quality is quarried on a small scale.

**LAND:**—The acreage of the county is 440,320, of which 363,474 acres are in a high state of cultivation. There are 3,225 farms of an average size of 127.7 acres. According to present selling prices, farm lands would aggregate a valuation of \$13,767,132. These farms are devoted to live stock raising and cereal growing. The soil is generally a limestone shale clay of dark color and splendid fertility. As a whole the county topo-

CASS COUNTY'S 1902 CROP			
	ACRES	PRODUCT	VALUE
Corn	142,127	6,395,715 *	\$2,014,650
Wheat	18,824	428,540 *	283,945
Oats	7,286	238,150 *	61,785
Hay	57,013	96,920 †	581,520
Forage	4,135	5,515 †	27,575
Flax	11,534	46,136 *	47,980
Broom Corn	22	12,100 †	325
Clover Seed		5,000 *	28,000
Grass Seed		6,810 *	10,890
Tobacco	20	13,000 †	1,300
Potatoes	1,074	150,360 *	52,625
Vegetables	1,000		58,370
Total			\$3,117,975
LIVE STOCK AND PRODUCTS			
KIND	NUMBER	VALUE	
Cattle	41,130	\$1,336,850	
Horses	14,762	984,135	
Mules	3,502	262,650	
Asses and Jennets	106	10,600	
Sheep	8,806	26,420	
Swine	85,758	857,580	
Chickens	205,944		
Turkeys	7,098	164,190	
Geese	3,301		
Ducks	2,708		
Swarms of Bees	3,171	9,050	
Honey	103,700 †	13,210	
Wool	33,066 †	3,510	
Milk	8,700,220 †		
Butter	653,800 †	227,445	
Eggs	1,061,750	182,720	
Total		\$4,028,360	
* Bushels.	† Pounds.	Dozen.	
† Tons.	§ Gallons.		

Photos in heading: Kellogg Greenhouse at Pleasant Hill—\$25,000 Square Feet of Glass; Cass County Corn.

graphically is one gently rolling prairie, with small streams intersecting at infrequent intervals. Farms are well improved with good fencing, large stock barns, windmill wells and comfortable dwellings. These may be bought at \$40 to \$50 an acre. The broken, stream-bordering land is available at \$30 an acre.

**MANUFACTURES:**—These are of local importance only. Brick and flour are chief, manufactured at the principal towns.

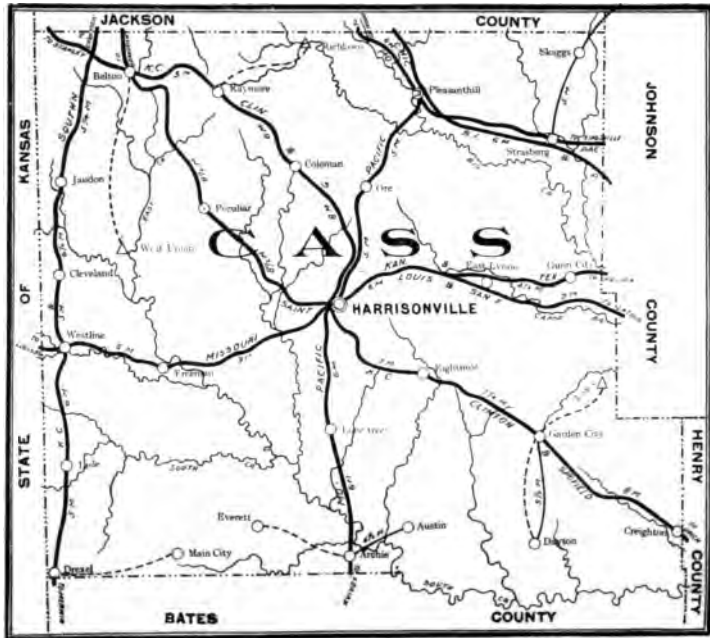
**TRANSPORTATION:**—These facilities are excellent, affording train service into Kansas City at every hour of the day. Through service is had also to St. Louis. Railroads centering in the county are Missouri Pacific,

Missouri, Kansas & Texas, Kansas City Southern, St. Louis & San Francisco, Kansas City, Clinton & Springfield, main lines and various branches.

**SCHOOLS:**—There are three high schools, one at Harrisonville, Pleasant Hill and Belton.

**TOWNS:**—Pleasant Hill, population 2,002; Harrisonville, population 1,844, county seat; and Belton, population 1,005, are the largest towns, supported by live stock, farming, railroads and manufacturing. Garden City, population 574; Drexel, 453; East Lynne, 353; Creighton, 360; Archie, 285; Freeman, 260; Raymore, 271; Gunn City, 147; Westline, 131; Peculiar, 104, are the incorporated towns. Each is the trading point and livestock center of its respective locality.

**NEWSPAPERS:**—Harrisonville: Cass County Democrat, Retort, Cass County Leader, Cass News; Pleasant Hill: Local, Times; Belton Herald; Garden City: The Garden City Views, Enterprise; Drexel Star; Creighton News.



PANORAMA OF HARRISONVILLE.



**U**NEXCELLED in fertility, Chariton county gives its life and usefulness to stock raising and general farming. The county is bounded on the south by the Missouri river and by the Chariton on the west. Its live stock surplus attains the elevation of four millions of dollars worth a year, and in addition to feeding this large amount of live stock, more than two million dollars worth of corn and hay are sold. Distinctive productions of the agricultural department of the county are tobacco, sugar cane, and potatoes. Small sorghum molasses mills and creameries are found throughout the county. The physical area is 740 square miles, equivalent to 473,600 acres. In cultivation are 350,567 acres. Farms number 3,805, with an average acreage of 118.4, worth, by actual present price figures, \$9,513,228. Blue grass is native to all soils.

**POPULATION:**—White, 23,580; colored, 3,246; American born, 25,830; foreign born, 996; total, 26,826. Farm homes owned, 2,519; rented, 1,247; other homes owned, 916; rented, 808; total families, 5,490.

**FINANCE:**—County tax, 40 cents on one hundred dollars valuation; school tax, from seven cents to \$1.25; average, 45 cents; total assessed valuation, \$9,362,042; assessment based upon 40 per cent valuation; no county debt; no township debt.

**TIMBER:**—Formerly all varieties of oak, walnut, mulberry, hickory, ash, linden, hackberry, cottonwood, sycamore, and maple were found. One-tenth of the land was of scrub oak covering in this respect, and the balance bore large growth timbers, especially so in the bottoms. Timber originally covered slightly more than one-half of the land acreage. One-half of this amount has been clean-cut and put into cultivable shape; the remainder yet remains timbered with part of the largest size trees removed. There is yet considerable timber of commercial size.

**MINERALS:**—Coal mines are now, as for many years, worked only during the fall and winter months to supply the local demand. At Salisbury, at a depth of 150 feet, coal is found. A vein near the surface is worked in a small way at Brunswick, Indian Grove, Guthridge Mills, Keytesville, Newcomer, and Salisbury. Vein is from 18 to 42 inches thick.

**LAND:**—All the various land lays are presented, from high rolling prairie to low overflow bottom. One-half of the county lying in the north side is high rolling prairie and readily sells at \$60 an acre. The soil is a

CHARITON COUNTY'S 1902 CROP			
	ACRES	PRODUCT	VALUE
Corn	94,016	5,170,880 *	\$1,525,410
Wheat	26,980	674,500 *	370,975
Oats	5,947	225,995 *	59,885
Hay	48,137	96,175 †	481,375
Forage	7,460	9,325 †	46,825
Flax	14	84	85
Broom Corn	5	2,500 †	70
Clover Seed		320 *	1,700
Grass Seed		11,700 *	21,060
Tobacco	750	525,700 †	49,942
Potatoes	2,047	296,615 *	94,980
Vegetables	1,250		55,895
Total			\$2,708,092
LIVE STOCK AND PRODUCTS			
KIND	NUMBER	VALUE	
Cattle	47,483	\$1,422,900	
Horses	14,890	902,685	
Mules	4,853	369,975	
Asses and Jennets	111	11,100	
Sheep	9,285	27,855	
Swine	55,007	556,070	
Chickens	241,743 †		
Turkeys	5,736 †	157,490	
Geese	4,426 †		
Ducks	3,885 †		
Swarms of Bees	4,019	10,375	
Honey	130,907 †	16,745	
Wool	88,500 †	6,415	
Milk	3,384,070 †	184,935	
Butter	630,156 †		
Eggs	1,457,210 †	182,150	
Total		\$3,925,865	
* Bushels.	† Pounds.	‡ Dozen.	
† Tons.	§ Gallons.		

*s in heading: Sol Smith Russell and his old home; Plowing by Steam.*

deep, black vegetable loam of fine fertility. In depth it averages 32 inches. Much of this land is pastured and as a result has long ago become substantially set in blue grass, which is indigenous. The Missouri river bottoms embrace an acreage equal to one-tenth of the county's area. Usually the land is above overflow. The soil is that alluvium which leads the world in cereal production. Bottom farms sell at \$60 an acre. Northwest from Keytesville to the county line lies a brown loam soil of loess character, wherein fruit, hay and wheat are grown to eminent advantage. It is rolling, was originally timbered and sells at \$40 an acre. One-tenth of the county is scrub oak land, worth \$25 to \$30 an acre. Lastly, there is a one-tenth portion of undrained creek bottoms which may be had at \$15 to \$20 an acre. Wonders have been worked with some of this land drained.

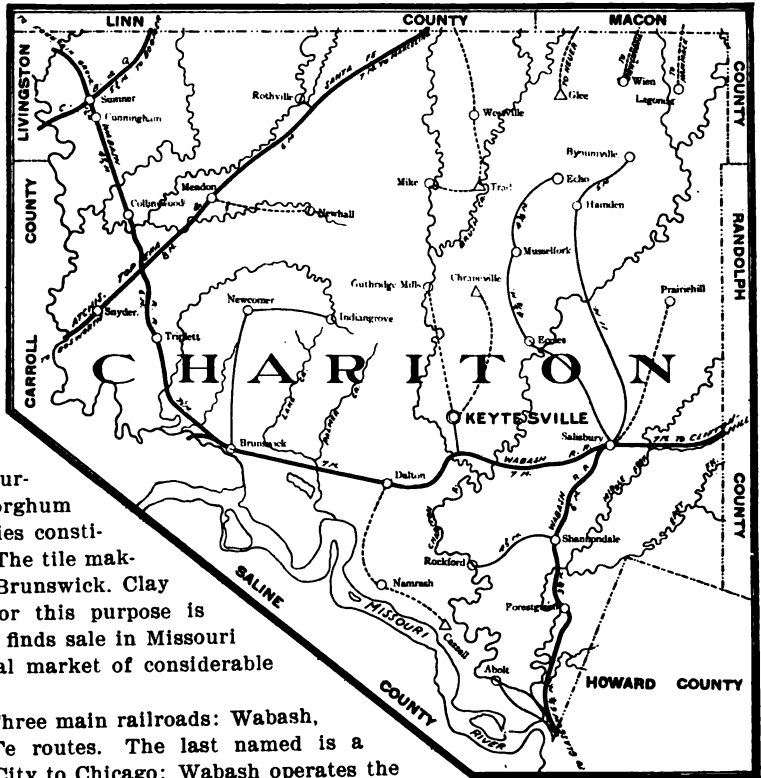
**MANUFACTORIES:**—Flouring mills, tiling plant, sorghum mills, and small creameries constitute the manufactories. The tile making factory is located at Brunswick. Clay of splendid properties for this purpose is found here. The product finds sale in Missouri markets, including a local market of considerable extent.

**TRANSPORTATION:**—Three main railroads: Wabash, Burlington and Santa Fe routes. The last named is a trunk line from Kansas City to Chicago; Wabash operates the main Kansas City-St. Louis, and Omaha-St. Louis lines through the south and west parts of Chariton county. The Burlington, Kansas City to Chicago, crosses the northwest corner.

**FISHING:**—Grand river, Chariton river and the Missouri afford fishing. There is also a lake near Sumner, in the northwest corner of the county which is the resort of many camping parties in summer.

**TOWNS:**—Brunswick, population 1,403, is junction of the Wabash lines; Salisbury, population 1,847, is terminal for a branch line connecting Glasgow with the main line Wabash; Keytesville, 1,127, is the county seat; Triplett, 342; Mendon, 252; Dalton, 223; Cunningham, 160; and Sumner are the leading towns, all supported in the main by live stock and general agriculture.

**NEWSPAPERS:**—Brunswick Brunswicker; Keytesville Courier, Signal; Mendon Citizen; Salisbury Democrat; Salisbury Press-Spectator; Triplett Tribune; Sumner Star.



POULTRY RAISING IS PROFITABLE.





**U**NEXCELLED in fertility, Chariton county gives its life and usefulness to stock raising and general farming. The county is bounded on the south by the Missouri river and by the Chariton on the west. Its live stock surplus attains the elevation of four millions of dollars worth a year, and in addition to feeding this large amount of live stock, more than two million dollars worth of corn and hay are sold. Distinctive productions of the agricultural department of the county are tobacco, sugar cane, and potatoes. Small sorghum molasses mills and creameries are found throughout the county. The physical area is 740 square miles, equivalent to 473,600 acres. In cultivation are 350,567 acres. Farms number 3,805, with an average acreage of 118.4, worth, by actual present price figures, \$9,513,228. Blue grass is native to all soils.

**POPULATION:**—White, 23,580; colored, 3,246; American born, 25,830; foreign born, 996; total, 26,826. Farm homes owned, 2,519; rented, 1,247; other homes owned, 916; rented, 808; total families, 5,490.

**FINANCE:**—County tax, 40 cents on one hundred dollars valuation; school tax, from seven cents to \$1.25; average, 45 cents; total assessed valuation, \$9,362,042; assessment based upon 40 per cent valuation; no county debt; no township debt.

**TIMBER:**—Formerly all varieties of oak, walnut, mulberry, hickory, ash, linden, hackberry, cottonwood, sycamore, and maple were found. One-tenth of the land was of scrub oak covering in this respect, and the balance bore large growth timbers, especially so in the bottoms. Timber originally covered slightly more than one-half of the land acreage. One-half of this amount has been clean-cut and put into cultivable shape; the remainder yet remains timbered with part of the largest size trees removed. There is yet considerable timber of commercial size.

**MINERALS:**—Coal mines are now, as for many years, worked only during the fall and winter months to supply the local demand. At Salisbury, at a depth of 150 feet, coal is found. A vein near the surface is worked in a small way at Brunswick, Indian Grove, Guthridge Mills, Keytesville, Newcomer, and Salisbury. Vein is from 18 to 42 inches thick.

**LAND:**—All the various land lays are presented, from high rolling prairie to low overflow bottom. One-half of the county lying in the north side is high rolling prairie and readily sells at \$60 an acre. The soil is a

CHARITON COUNTY'S 1902 CROP			
	ACRES	PRODUCT	VALUE
Corn	94,016	5,170,880 *	\$1,525,410
Wheat	26,980	674,500 *	370,375
Oats	5,947	225,935 *	59,885
Hay	48,137	96,175 †	481,375
Forage	7,460	9,325 †	46,825
Flax	14	84 *	85
Broom Corn	5	2,500 †	70
Clover Seed		320 *	1,700
Grass Seed		11,700 *	21,060
Tobacco	750	525,700 †	49,942
Potatoes	2,047	296,515 *	91,980
Vegetables	1,250		55,895
Total			\$2,708,092
LIVESTOCK AND PRODUCTS			
KIND	NUMBER	VALUE	
Cattle	47,433	\$1,422,990	
Horses	14,890	992,665	
Mules	4,853	363,975	
Asses and Jennets	111	11,100	
Sheep	9,285	27,855	
Swine	55,007	556,070	
Chickens	241,743		
Turkeys	5,736	157,490	
Geese	4,426		
Ducks	3,865		
Swarms of Bees	4,019	10,375	
Honey	190,967 †	16,745	
Wool	38,500 †	6,415	
Milk	3,384,070 †	181,985	
Butter	630,156 †		
Eggs	1,457,210 †	182,150	
Total		\$3,926,865	
* Bushels.	† Pounds.	Dozen.	
† Tons.	§ Gallons.		

Photos in heading: Sol Smith Russell and his old home; Plowing by Steam.

deep, black vegetable loam of fine fertility. In depth it averages 32 inches. Much of this land is pastured and as a result has long ago become substantially set in blue grass, which is indigenous. The Missouri river bottoms embrace an acreage equal to one-tenth of the county's area. Usually the land is above overflow. The soil is that alluvium which leads the world in cereal production. Bottom farms sell at \$60 an acre. Northwest from Keytesville to the county line lies a brown loam soil of loess character, wherein fruit, hay and wheat are grown to eminent advantage. It is rolling, was originally timbered and sells at \$40 an acre. One-tenth of the county is scrub oak land, worth \$25 to \$30 an acre. Lastly, there is a one-tenth portion of undrained creek bottoms which may be had at \$15 to \$20 an acre. Wonders have been worked with some of this land drained.

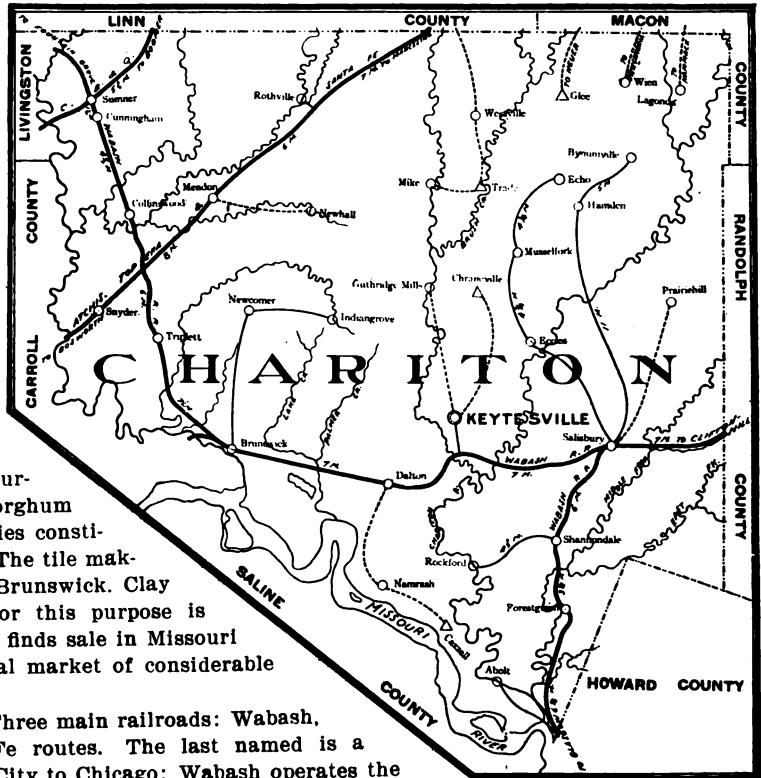
**MANUFACTORIES:**—Flouring mills, tiling plant, sorghum mills, and small creameries constitute the manufactories. The tile making factory is located at Brunswick. Clay of splendid properties for this purpose is found here. The product finds sale in Missouri markets, including a local market of considerable extent.

**TRANSPORTATION:**—Three main railroads: Wabash, Burlington and Santa Fe routes. The last named is a trunk line from Kansas City to Chicago; Wabash operates the main Kansas City-St. Louis, and Omaha-St. Louis lines through the south and west parts of Chariton county. The Burlington, Kansas City to Chicago, crosses the northwest corner.

**FISHING:**—Grand river, Chariton river and the Missouri afford fishing. There is also a lake near Sumner, in the northwest corner of the county which is the resort of many camping parties in summer.

**TOWNS:**—Brunswick, population 1,403, is junction of the Wabash lines; Salisbury, population 1,847, is terminal for a branch line connecting Glasgow with the main line Wabash; Keytesville, 1,127, is the county seat; Triplett, 342; Mendon, 252; Dalton, 223; Cunningham, 160; and Sumner are the leading towns, all supported in the main by live stock and general agriculture.

**NEWSPAPERS:**—Brunswick Brunswicker; Keytesville Courier, Signal; Mendon Citizen; Salisbury Democrat; Salisbury Press-Spectator; Triplett Tribune; Sumner Star.



POULTRY RAISING IS PROFITABLE.



**C**HRISTIAN is situated in the Ozark mountains of southwest Missouri, ten miles south of Springfield. Its surface in the north and west comprises considerable plateau land, high laying and level, and elsewhere is characterized by deep mountain gorges and corresponding cliffs. Proximity to market and the advantages of a railroad have made timber resources count for considerable in the past. And the same forces are now developing the county in that to which soil and climate are best suited, namely, fruit growing. Mineral deposits of the county are of consequence. Lead and zinc mines are operated near Ozark, county seat, and location of a mineral reduction plant. Mineral waters are here meritorious. Springs are located at Reno and Eaudevie. Farms of the county are estimated to be worth, according to present market price, \$3,112,266. They number 2,648, of an average size of 97.5 acres. County contains 556 square miles, 355,840 acres, of

which 149,140 acres are in cultivation. Last year surplus products amounted to \$1,000 for each farm. All grains, vegetables, and fruits of this latitude are raised. Tobacco, strawberries, and tomatoes are of the fancy, as distinguished from staple, production. Railroad ties have long supplied ready money to farmers who choose to employ otherwise idle time.

**POPULATION:**—White, 16,822; colored, 117; American born, 16,522; foreign born, 417; total, 16,939. Farm homes owned, 2,050; rented, 645; other homes owned, 338; rented, 422; total families, 3,455.

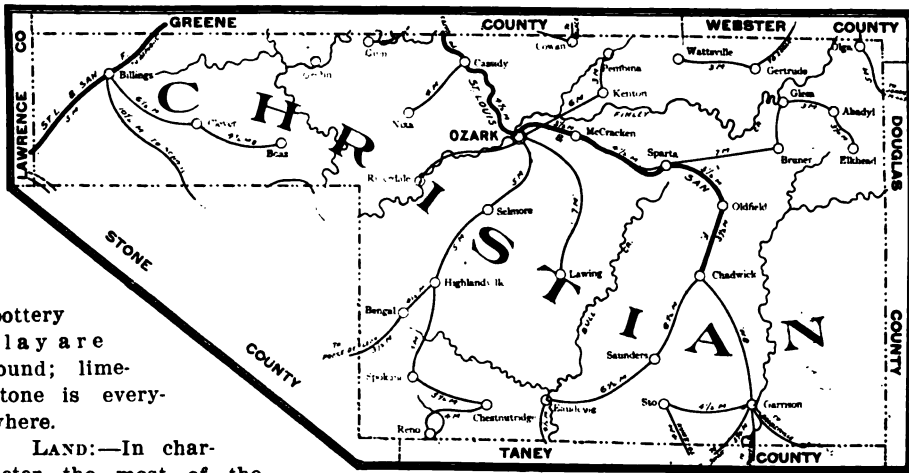
**FINANCE:**—County tax, 40 cents; school tax, average, 64 cents; total assessed valuation, \$3,315,010; assessed valuation per cent of actual valuation, sixty-six and two-thirds; county debt, \$28,450; no township debt.

**TIMBER:**—Originally there was an unbroken forest of white oak, black oak, post oak, black-jack, and a few other species, but easily accessible commercial growth has been removed. Acreage timbered is 206,700, most of which is second, small growth. In eastern and southern sections, however, are white oak and black oak of marketable size. Creek bluffs are often crowned with cedar thickets, timbers of fence-post size.

**MINERALS:**—One-fifth of county shows mineral prospects, but a comparatively small portion has been developed. Lead and zinc are mined at Ozark. One mine output for last year was 180 tons of lead. Iron evidences are abundant; no active mines. Fire and

CHRISTIAN COUNTY'S 1902 CROP			
	ACRES	PRODUCT	VALUE
Corn	42,579	1,490,265 *	\$ 469,435
Wheat	36,458	674,475 *	860,960
Oats	5,893	194,470 *	51,535
Hay	12,150	18,225 †	109,350
Forage	1,630	2,175 †	10,875
Broom Corn	9	1,950 †	135
Clover Seed		1,750 *	9,800
Grass Seed		40 *	65
Cotton	10	3,250 †	230
Tobacco	40	29,900 †	2,960
Potatoes	554	55,400 *	19,380
Vegetables	880		84,835
<b>Total</b>			<b>\$1,069,600</b>
LIVE STOCK AND PRODUCTS			
KIND	NUMBER		VALUE
Cattle	15,885		\$ 397,125
Horses	6,296		377,760
Mules	1,601		112,070
Asses and Jennets	55		4,950
Sheep	5,853		17,560
Swine	27,910		279,100
Chickens	100,898		
Turkeys	3,753		74,730
Geese	3,060		
Ducks	2,823		
Swarms of Bees	588		1,685
Honey	19,600 †		2,450
Wool	18,825		3,155
Milk	1,980,868 ‡		
Butter	374,742 †		101,545
Eggs	691,720 †		86,465
<b>Total</b>			<b>\$1,458,595</b>
* Bushels.	† Pounds.	‡ Dozen.	
† Tons.	§ Gallons.		

Photo in heading: A Christian County Cave, near Ozark,



pottery  
clay are  
found; lime-  
stone is every-  
where.

**LAND:**—In character the most of the soils consist of clay loam of varying depths underlaid by a bright red clay sub-soil. Creek and river bottom lands are of a deep, sandy loam soil, rich in organic matter and will support annual grain crops for years without use of fertilizers. Uplands are fertile according to depth of soil. In west end there is land very valuable for general agricultural purposes; also in vicinity of Nixa and between that town and Highlandville. Southern and extreme eastern parts are more broken; some level or undulating land is found in central eastern part. All upland soils are gravel-laden and in places very stony. Grain and grass thrive. Large areas of upland soils seem well adapted to tobacco growing. Price of lands range from \$5 to \$50 an acre. Maximum price is paid for best bottoms, which range from \$30 to \$50, depending upon situation with reference to market. Table lands in west end between Ozark and Sparta, in central district, and the prairie near Nixa, are priced at \$25 to \$35. Best ridge lands, improved, are selling at \$20 to \$25. Hill lands, improved, \$5 to \$15. Unimproved land sells at \$3 to \$15, depending upon timber growth or soil.

**TRANSPORTATION:**—St. Louis & San Francisco main line crosses northwest corner. Chadwick branch opens center of county.

**MINERAL SPRINGS:**—At Reno and Eau-de-vie, in south part of county. These waters possess medicinal properties and the towns are popular local resorts. Fish- and hunting are additional attractions of these vicinities.



CHRISTIAN COUNTY FARM SCENE.

**TOWNS:**—Ozark, county seat, population 830, has two flouring mills, canning factory and mineral reduction works. Billings, population 702, flouring mill, grain elevator, canning factory, creamery, and iron foundry; center of fruit and dairying region. Sparta, 300, flouring mill, and farming center. Nixa, Chadwick, Kenton, Riverdale, Griffin, Highlandville, McCracken, and Clever.

**NEWSPAPERS:**—Ozark Democrat; Christian County Republican; Sparta Leader; Billings Times, Post; Nixa News.



PEACH ORCHARD

IN THE OZARKS.



**C**LARK is a county of agriculture; of grain elevators; of cattle and horses and hogs and hay. Vinegar factories and pickle plants are feature lending. Staves are made. Agricultural surpluses mean four million and a half dollars a year. Clark county occupies the northeast corner of Missouri. Its farm lands are valued at \$7,246,020. County area is 510 square miles, equal to 326,400 acres, 224,651 of which are in a high state of cultivation. Farms number 2,514, embracing in average 122.3 acres each of land of different descriptions. Every farmer has a small orchard.

**POPULATION:**—White, 15,233; colored, 150; American born, 14,946; foreign born, 437; total, 15,383. Farm homes owned, 1,652; rented, 797; other homes owned, 707; rented, 392; total families, 3,548. German population is chiefly immediately southwest of Kahoka.

**FINANCE:**—County tax, 65 cents; school tax, average, 40 cents; total assessed valuation, \$4,698,627; assessed valuation per cent of actual valuation 40; county debt, \$218,500; township indebtedness, \$6,500.

**TIMBER:**—Originally upon two-thirds of surface, along streams and extending well out into interior where prairie stretches parallel the streams. Oak, elm, hickory, walnut, maple, birch, willow, cottonwood, sycamore, and linden. One-tenth is still timbered, along streams.

**MINERALS:**—Coal is mined in northeast corner, near Dumas. Croppings found on streams as far south as Kahoka. Limestone is plentiful along stream bluffs.

**LAND:**—River bottom, prairie, and hill lands are the three main divisions in topography. Bottom land approximates 45,000 acres, three-fourths of which may be bought for \$40 or less per acre. From Alexandria to St. Francisville is a well-kept levee, behind which land reaches \$65. Second bottom farms in southern part of county are known to have sold at \$75 an acre. Small acreage of land unprotected from Mississippi river may be bought for \$10 an acre. Soil is black accretion, fertile in extreme. Prairie land occupies the center of spaces between streams and have a common general direction northwest and southeast. Soil is rich black loam with clay subsoil. Best of this prairie is had at \$50; down to \$35. Bluff land which is of little extent, may be bought at \$15 an acre. It is usually timbered. Land is black soil over clay except where clay crops out through erosion. Farm improvements are best on

CLARK COUNTY'S 1902 CROP			
	ACRES	PRODUCT	VALUE
Corn	75,557	3,400,065 *	\$1,037,020
Wheat	5,892	111,960 *	87,173
Oats	19,320	672,700 *	168,175
Hay	39,815	50,725 †	298,625
Forage	8,065	9,410 †	47,050
Broom Corn	5	2,500 †	70
Clover Seed		50 *	330
Grass Seed		4,300 *	6,020
Tobacco	5	4,750 †	430
Potatoes	1,115	161,385 *	40,845
Vegetables	1,615		55,780
<b>Total</b>			<b>\$1,720,970</b>
LIVE STOCK AND PRODUCTS			
KIND	NUMBER	VALUE	
Cattle	32,473	\$1,055,372	
Horses	11,104	740,205	
Mules	1,300	97,500	
Asses and Jennets	30	3,000	
Sheep	10,348	31,045	
Swine	37,596	378,960	
Chickens	167,824		
Turkeys	4,999	113,435	
Geese	4,012		
Ducks	2,465		
Swarms of Bees	2,407	5,515	
Honey	80,238 †	10,030	
Wool	43,000 †	7,176	
Milk	1,634,336 †	129,930	
Butter	324,131 †		
Eggs	824,900 †	103,475	
<b>Total</b>		<b>\$2,875,723</b>	
* Bushels.	† Pounds.	Dozen.	
† Tons.	‡ Gallons.		

Photo in heading: Grain Elevator at Wayland.

prairies, along second bottom lands at edge of Mississippi river bluffs, two to seven miles back from the river, and behind the levee. Within half a mile of Kahoka, because of location, land has sold at \$75 an acre. Forty-five dollars an acre will buy land unsurpassed in fertility, six miles from town.

**MANUFACTORIES:**—Vinegar and pickle works, flouring mills, and small wagon factories. Alexandria supports a barrel stave factory.

**GRAIN ELEVATORS:**—Clark probably has more grain elevators than any other Missouri county. There are twelve, holding from ten thousand to forty thousand bushels of corn, wheat, or oats, the principal cereals handled. Wayland elevators ship over 1,000,000 bushels of corn on an average year.

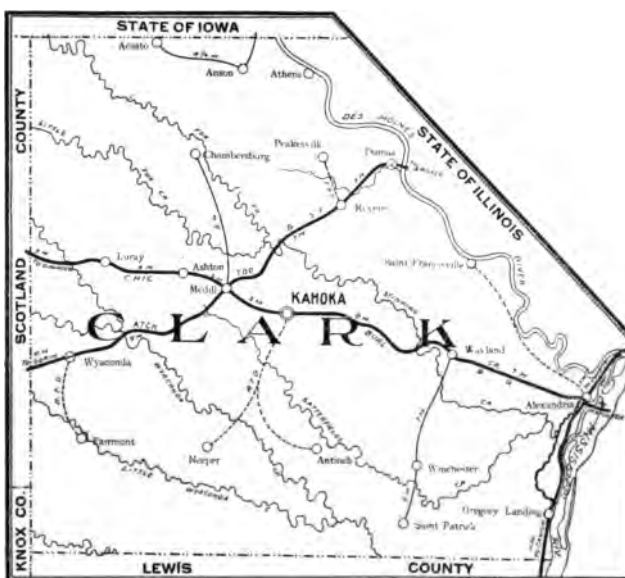
**TRANSPORTATION:**—Three railroads: to Keokuk, Fort Madison, Chicago, Kansas City and St. Louis direct. Lines: Santa Fe Route, St. Louis, Keokuk & Northwestern; Keokuk & Western.

**SCHOOLS:**—Kahoka High School is approved by the University of Missouri. Alexandria, Wyaconda, and Luray have graded school system. Kahoka Business College.

**MINERAL WATER:**—Sulphur water springs dot the Mississippi river bluffs. Luray also is location of sulphur springs.

**TOWNS:**—Kahoka, county seat, city ownership of electric lights and waterworks; two telephone systems. Court meets April and October. Business streets macadam; vinegar factory, grist and saw mill, roller mills, two grain elevators, wagon factory, canning and pickle factory. Wyaconda, flouring mill, axe handle factory, elevator, grist mill. Alexandria, stave factory, canning factory, pickle works. Gregory, Revere, Wayland, Aston and Luray are elevator towns. All supported by agriculture.

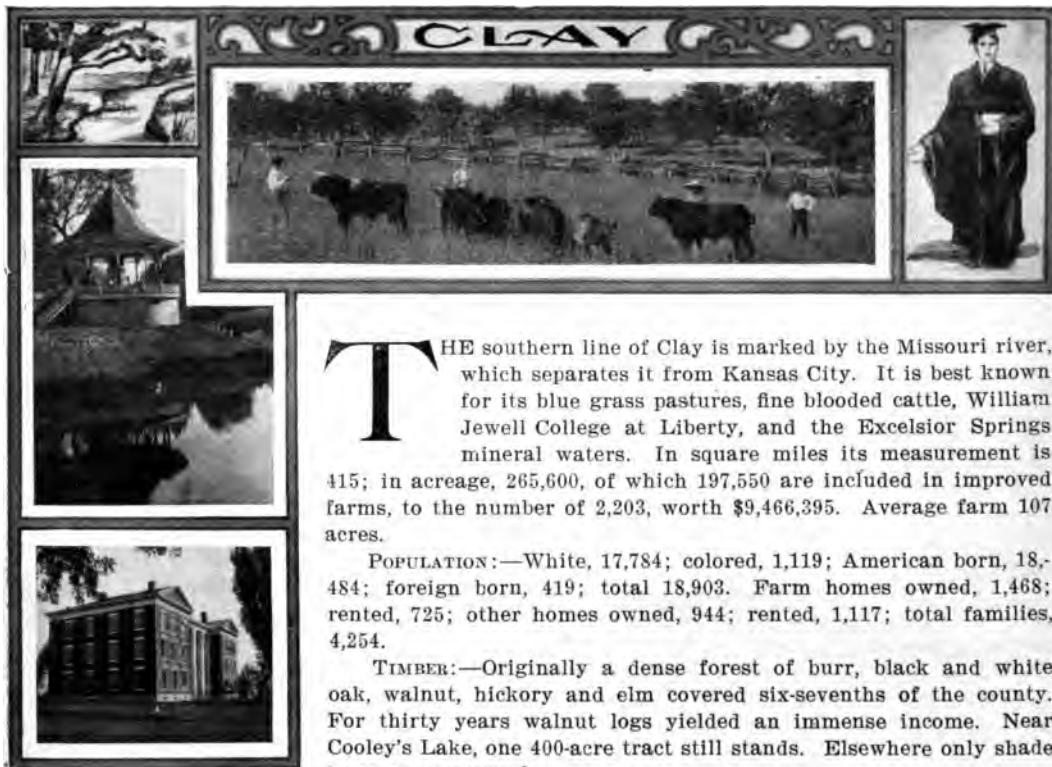
**NEWSPAPERS:**—Kahoka Gazette-Herald, Courier, Review; Wyaconda News; Wayland Old Homestead.



KAHOKA CANNING COMPANY.



A NORTH MISSOURI OAT FIELD.



**T**HE southern line of Clay is marked by the Missouri river, which separates it from Kansas City. It is best known for its blue grass pastures, fine blooded cattle, William Jewell College at Liberty, and the Excelsior Springs mineral waters. In square miles its measurement is 415; in acreage, 265,600, of which 197,550 are included in improved farms, to the number of 2,203, worth \$9,466,395. Average farm 107 acres.

**POPULATION:**—White, 17,784; colored, 1,119; American born, 18,484; foreign born, 419; total 18,903. Farm homes owned, 1,468; rented, 725; other homes owned, 944; rented, 1,117; total families, 4,254.

**TIMBER:**—Originally a dense forest of burr, black and white oak, walnut, hickory and elm covered six-sevenths of the county. For thirty years walnut logs yielded an immense income. Near Cooley's Lake, one 400-acre tract still stands. Elsewhere only shade trees are preserved.

**COAL:**—At a great depth underlies the whole county. It is mined at Missouri City.

**CHARACTER AND PRICE OF LAND:**—The Missouri river bottom land is a narrow strip defined by the Wabash railroad, which follows the bluffs. The widest part of

this strip is at the Ray county border, where it is three miles. Price here varies widely, owing to its proximity to Kansas City. Harlem bottom averages \$200 per acre. It ranges from \$150 to \$1,000, held by speculators, occupied by truck gardeners. Once in ten years it overflows. East from Kansas City, the land gradually decreases in figure, down to \$50. East of Missouri City, the bottoms are higher, well improved, inhabited by people who make it home, and land brings \$50 to \$100, averaging \$60. Bounding this bottom is a half-mile strip of bluff land, exceeding rough and rocky. Beyond this lies blue grass hill land, long gentle slopes with foot fringes of small timbered streams. Around Liberty land sells at \$60 to \$100, the same being true of a twenty-five square mile strip bounded by Prathersville, Missouri City and Liberty, and of the land near Excelsior Springs, the latter strip being more hilly, but profiting by its location. In the northwestern half of the county extends, in a direction northeast and southwest, a strip embracing one-seventh of the county, original prairie, selling at \$50 to \$75 an acre. It is undulating. A strip south of Paradise embraces farms from \$60 to \$70. Forty to fifty dollar land is found north of Barry, east of Holt, and southwest of Greenville, in smaller tracts. Outside the Harlem or north Kansas City bottoms, farm improvements are as good as the best in Missouri. Corn and cattle are far in the lead

CLAY COUNTY'S 1902 CROP			
	ACRES	PRODUCT	VALUE
Corn	79,037	3,793,776 *	\$1,195,040
Wheat	9,918	228,115 *	131,165
Oats	2,993	73,490 *	19,105
Hay	18,475	32,330 †	226,310
Forage	1,990	3,655 †	13,275
Broom Corn	5	2,750 †	75
Clover Seed		540 *	2,970
Grass Seed		1,760 *	2,730
Tobacco	24	21,600 †	2,160
Potatoes	751	109,330 *	26,210
Vegetables	1,065		48,520
Total			\$1,667,590
LIVE STOCK AND PRODUCTS			
KIND	NUMBER	VALUE	
Cattle	31,374	\$1,117,155	
Horses	9,287	604,065	
Mules	2,025	151,875	
Asses and Jennets	158	15,800	
Sheep	15,455	51,515	
Swine	77,440	774,400	
Chickens	133,536		
Turkeys	6,022	131,385	
Geese	2,864		
Ducks	1,477		
Swarms of Bees	1,244	3,075	
Honey	41,467 †	3,185	
Wool	63,000 †	10,500	
Milk	2,013,694 \$	149,890	
Butter	403,380 †		
Eggs	753,400 †	94,175	
Total		\$3,109,020	
* Bushels.	† Pounds.	Dozen.	
† Tons.	\$ Gallons.		

among county export products; hogs and horses next in order.

*Photos in heading: Cattle on Blue Grass Pasture; Excelsior Springs Scene; William Jewell College, Liberty.*

**MANUFACTORIES:**—Brick yards at Birmingham and Holt; mineral water bottling at Excelsior Springs; flouring mills at Liberty, Kearney, Holt and Smithville.

**TRANSPORTATION:**—All roads lead to Kansas City, forty-five minutes from the county seat. Through lines are also available to St. Louis, St. Joseph, and Chicago. Following are mileages taxed: Wabash, main line, 23.41; branch, 9.48. Chicago, Milwaukee & St. Paul, 28.30. Burlington, 34.31. Pittsburg & Gulf, 23.90. Santa Fe, St. Joseph branch, 1.50. Union Depot Bridge & Terminal, 3.62.

**CHURCHES AND SCHOOLS:**—William Jewell College was founded in 1849 and since maintained by the Baptists of Missouri. Enrollment, 350; endowment-producing fund, \$425,000; funds and equipment, \$600,000; faculty members, 30; 10 buildings. Liberty Ladies College, a boarding school for young women, with academic and music departments, is a private institution founded in 1890, with a teaching corps of sixteen. Haynes Academy, at Excelsior Springs, is a co-educational preparatory school, established 1896. High schools are located at Liberty, Excelsior Springs, Kearney, Smithville.

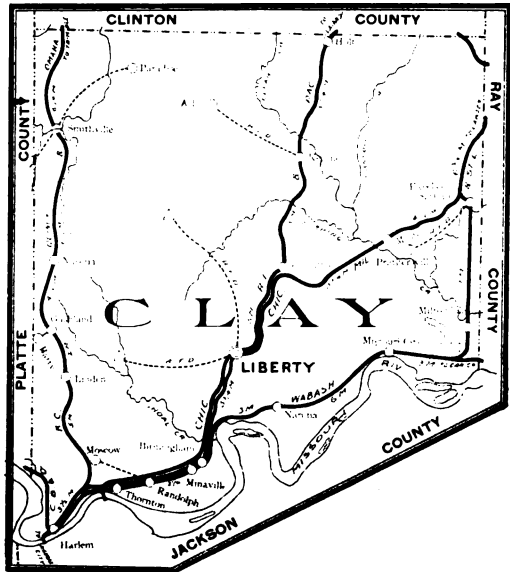
**WATER:**—Missouri river drains the south end; Fishing river the east and northeast; Big Shoal Creek the west. Cooley's Lake, eight miles south of Excelsior Springs, embraces 700 acres. Chick's Lake, 10 acres, and Cooper's Lake, 5 acres, are both within a mile of Excelsior Springs. They provide fishing for the thousands that spend the summer here.

**MINERAL SPRINGS:**—Siloam, alkaline bicarbonate; Regent, alkaline bicarbonate and iron; Sulpho-Saline; Salt-Sulphur; Steck's Iron Spring, Excelsior Springs, Lithia, Saratoga, Superior, and the Excelsior Springs are of undoubted medicinal value. Upon their merits stands the prosperous city of Excelsior Springs, 25 miles from Kansas City. Last year one railroad sold 110,000 round trip tickets from Kansas City to Excelsior Springs. People from all over the United States summer here. Bathing, boating, and fishing are attractions. Reed's Springs, seat of Odd Fellows' Home of Missouri, where live 100 women and children; and Thornton's Chalybeate Spring, both near Liberty, are less frequented springs.

**TOWNS:**—Liberty, county seat, is a school town; Excelsior Springs a summer resort; Kearney, Holt, Smithville, and Missouri City are small farming centers. The people are chiefly descendants of Virginians, Marylanders and North and South Carolinians.

**NEWSPAPERS:**—Liberty Tribune, Advance, Democrat; Excelsior Springs Standard, Journal, Daily Call; Smithville Herald, Star; Kearney Clipper; Holt Rustler.

**FINANCE:**—County tax, 30 cents; school tax average, 44 cents; taxation based on one-third actual valuation; assessed valuation, \$8,690,346. No debts.







**C** LINTON is one of the leading live stock counties of Missouri. It is the home of several of the best herds of Hereford and Shorthorn cattle, and within its borders is Lathrop, internationally known to be the greatest mule market in the world. During the British-Boer war it was the center of the mule industry in the United States. Between May 9 and December 30, 1901, 47,939 horses and mules were shipped through Lathrop barns. Daily average on hand, 5,000; largest number at one time, 8,127; largest number shipped out in one day, 3,500. One month the grain consumption was: corn, 45,000 bushels; oats, 25,000 bushels, and hay, 800 tons. Clinton is located by rail one and one-half hours north of Kansas City and one hour east of St. Joseph. Contains 440 square miles, in acres, 281,600, of which 251,250 are highly improved. Number of farms, 2,024, of an average size of 135.2 acres, valued at \$9,883,089.

**POPULATION:**—White, 16,290; colored, 1,073; American born, 16,926; foreign born, 437; total, 17,363. Farm homes owned, 1,353; rented, 595; other homes owned, 1,157; rented, 798; total families, 3,903.

**LAND:**—Topographically, Clinton is undulating prairie; never flat; seldom billowy. In portions of township 56, ranges 30 and 32, and in narrow confines near Haynesville, Bainbridge, and Mecca there is some broken, timbered land. Within three miles of Cameron, Plattsburg and Lathrop farms reach

\$100 an acre. The cheapest land in the county is \$40. General average price, \$50 to \$70, depending upon improvements and individual lay of land. Soil is black prairie loam of a depth of two to four feet, over sub-soil of porous clay. Blue grass grows wild. Cattle and corn exportations amount to nearly three millions of dollars annually. A limestone is found along the small streams sufficient for foundation work. Timber exists in quantity sufficient for local firewood and rough board use. Originally there were 30,000 acres of black oak, post oak, black walnut, elm, hickory, sycamore, cottonwood and ash along the streams and upon the lesser level places.

Manufacturing is limited to flouring mills, of which two are at Plattsburg; one each at Cameron, Lathrop and Turney.

**TRANSPORTATION:**—Two railroads into St. Joseph and two into Kansas City provide suburban privileges. Railroad mileage taxed is: Hannibal & St. Joseph, main line, 13.11; branch, 22.72; Kansas City, Peoria & Chicago, 24.78; Leavenworth branch of the Chicago, Rock Island & Pacific, 28.09; Atchison, Topeka & Santa Fe, St. Joseph branch, 25.95; Kansas City, Peoria & Chicago, Gower branch, 10.20.

**COLLEGES AND HIGH SCHOOLS:**—Missouri Wesleyan College, at Cameron, is co-educational academic institution, founded in 1883, now under the Missouri Conference of Methodist Episcopal church. Has thirteen

CLINTON COUNTY'S 1902 CROP			
	ACRES	PRODUCT	VALUE
Corn	104,693	4,397,106 *	\$1,385,090
Wheat	3,290	55,780 *	37,825
Oats	6,285	257,603 *	68,975
Hay	33,793	57,450 †	315,975
Forage	3,245	4,325 †	21,625
Broom Corn	66	36,300 †	1,000
Clover Seed		1,500 *	8,250
Grass Seed		3,500 *	5,425
Tobacco	10	9,000 *	900
Potatoes	684	102,600 *	24,625
Vegetables	795		34,150
<b>Total</b>			<b>\$1,901,840</b>
LIVE STOCK AND PRODUCTS			
KIND	NUMBER	VALUE	
Cattle	43,206	\$1,404,195	
Horses	10,418	694,535	
Mules	2,292	171,900	
Asses and Jennets	53	5,800	
Sheep	7,098	23,660	
Swine	74,775	747,750	
Chickens	114,919		
Turkeys	4,485	117,150	
Geese	2,506		
Ducks	1,646		
Swarms of Bees	1,860	4,925	
Honey	62,000 †	7,750	
Wool	31,300 †	5,250	
Milk	2,307,750 ‡	140,190	
Butter	396,107 ‡		
Eggs	714,560	89,325	
<b>Total</b>		<b>\$3,402,480</b>	
* Bushels.	† Pounds.	Dozen.	
† Tons.	§ Gallons.		

Photos in heading: Lathrop Mule Barn; A Plattsburg Animal; Mules Awaiting Exportation.

instructors. Preparatory, collegiate, normal, music departments. Endowment, \$22,000. High schools conforming to course of study prescribed by the University of Missouri are located at Cameron, Plattsburg, and Lathrop.

Smith's Fork of Platte river crosses the center of the county from east to west; Shoal creek and Castile creek are in the east and northwest portions respectively. These contribute to stock water, which is, however, furnished mainly by windmill wells and ponds. One mineral spring, two miles south of Plattsburg, gives basis to a small summer resort. A hotel and private residences accommodate seventy-five visitors during the season.

**TOWNS:**—Cameron, Plattsburg and Lathrop are the principal towns, each distinctive as to commercial features. The first is a Burlington railroad division town; Plattsburg, county seat, is a fine-blooded cattle center; and Lathrop is a horse and mule market. All derive large income from agri-

culture and stock raising. All are lighted with electricity and are telephone centers for surrounding country. All have main streets paved or macadamized, and Cameron has waterworks system. Cameron, Turney and Gower are important dairy produce shipping points. Trimble, Converse, Osborn are live railroad towns.

**ROADS:**—King dragging system is being used, proving highly efficient in making them among the best of the State.

**FRUIT:**—There are many orchards. One commercial orchard of ninety acres in township 54, section 31; other than this they are of acreages corresponding to private needs.



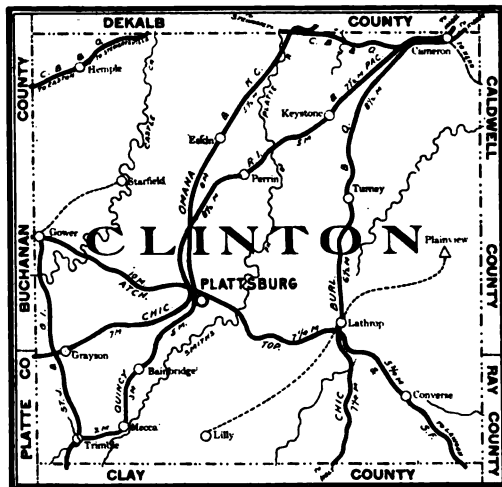
MULES AND HORSES, CLINTON COUNTY.

**NEWSPAPERS:**—Cameron Sun, Observer; Plattsburg Leader, Democrat-Lever; Lathrop Monitor, Herald; Turney Times; Gower Epitomist.

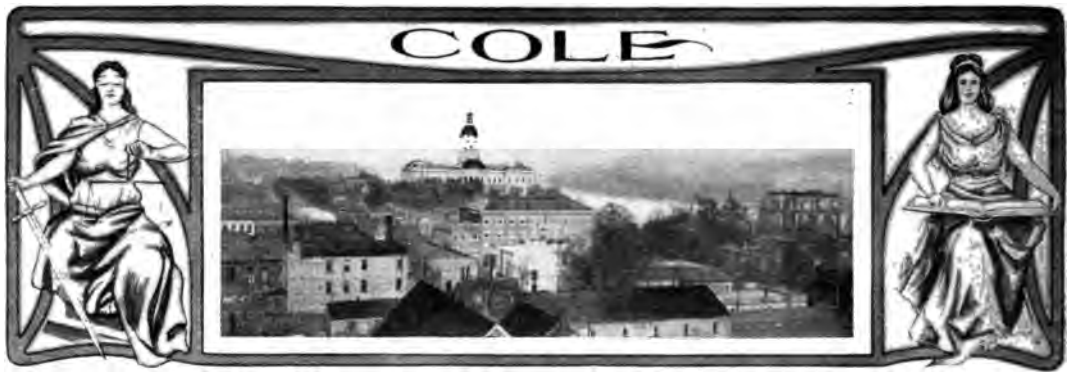
**FINANCE:**—County tax, 70 cents; school tax up to \$1.20; average, 40 cents; total assessed valuation, \$7,923,521; assessed valuation per cent of real value, 40; county debt, \$25,000; no township debt.

**SANITARIUMS:**—Clinton county poor house is known for its model character. It has no superior in the State, among the county institutions. Recently the Plattsburg Osteopathic Sanitarium has been established at Plattsburg.

**STOCK SALES:**—Periodical sales of pure-bred cattle are held at Plattsburg.



COUNTY INFIRMARY.



**S**ITUATED near the geographical center of the State is Cole county, upon the south bank of the Missouri river. Jefferson City, its county seat, is the capital of Missouri. To this fact is due its liveliest commercial interests and its widest renown. At Jefferson City are the chief offices of the machinery of the State, Supreme Court and penitentiary. Aside from its State interests, Cole is engaged in manufacturing, stock raising, rail-roading, fruit growing and general farming. There are five shoe factories in Jefferson City, producing ten thousand pairs daily; an overall factory, brewery, one of the largest publishing houses and binderies in the State and the largest saddle-tree factory in the world. In a live stock way, cattle, horses and mules, hogs and sheep lead. Four miles east of Jefferson City are relay stock yards, where 300,000 sheep are fed annually for St. Louis and Kansas City markets. Physically the size of Cole county is 390 square miles.

**POPULATION:**—White, 18,317; colored, 2,261; American born, 18,863; foreign born, 1,715; total, 20,578. Farm homes owned, 1,324; rented, 362; other homes owned, 998; rented, 1,005; total families, 3,689. The foreign born are practically all German.

**FINANCE:**—County tax, 50 cents on one hundred dollars valuation; school tax, from five cents to \$1.20; average, 40 cents; total assessed valuation, \$5,593,294; assessed valuation is one-third of actual value of property; county debt, \$70,000; no township indebtedness.

**TIMBER:**—Approximate area, 75,000 acres; 50,000 acres hoop-pole size, and 2,500 acres marketable timber. Fifteen thousand acres bear white oak of tie timber value. Ninety thousand ties are shipped out annually. Originally the entire county was timbered with white oak, black oak, post oak, black-jack, walnut, sycamore, elm, cottonwood.

**MINERALS:**—Coal is deposited in pockets. Annual output is 1,000 tons. Two principal mines are south of Elston. One shaft 66 feet deep is working a coal deposit 27 feet deep. Another shaft 50 feet deep has coal 18 feet in thickness. Limestone, lead and zinc are taken from the ground.

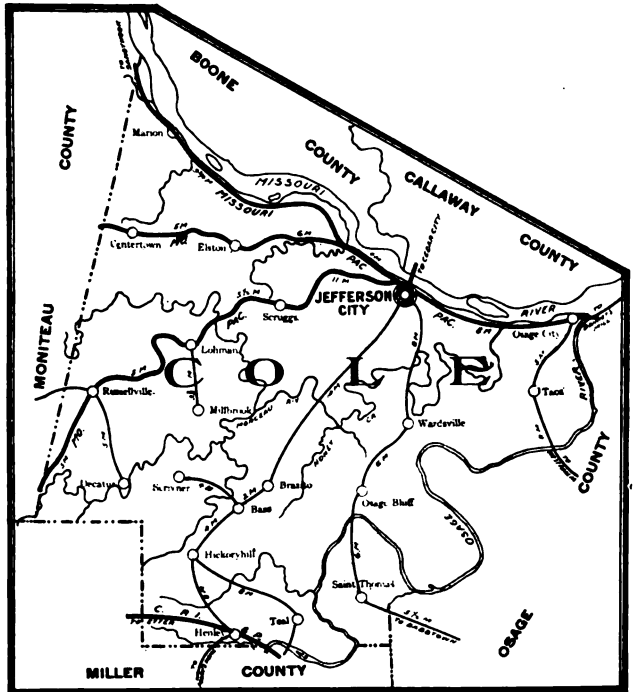
**LAND:**—Being a river county and intersected by numerous streams of irregular courses, Cole is rather broken in topography. Excepting narrow strips of bottom land at several points along the Missouri, wide bottoms alongside the Osage and upon the Moreau creeks, the county is hilly with red limestone clay soil, of Ozark border complexion and character. This is especially favorable to fruit and wheat. There are five thousand acres planted in bearing orchards of apples, peaches, plums and pears. Farm lands sell at \$20 to \$60 an acre, according to the acreage of bottom land

COLE COUNTY'S 1902 CROP			
	ACRES	PRODUCT	VALUE
Corn	27,463	1,180,909 *	\$348,370
Wheat	35,069	666,310 *	366,470
Oats	4,711	150,750 *	39,950
Hay	16,796	28,555 †	228,440
Forage	490	610 †	3,050
Broom Corn	1	500 †	15
Clover Seed		2,890 *	16,185
Grass Seed		25 *	45
Tobacco	22	15,400 †	1,465
Potatoes	821	114,940 *	36,780
Vegetables	645		40,910
<b>Total</b>			<b>\$1,081,680</b>
LIVE STOCK AND PRODUCTS			
KIND	NUMBER	VALUE	
Cattle	12,470	\$ 374,100	
Horses	4,544	295,360	
Mules	1,681	117,670	
Asses and Jennets	33	3,300	
Sheep	5,472	14,415	
Swine	20,079	200,790	
Chickens	90,876	66,385	
Turkeys	3,246		
Geese	3,392		
Ducks	616	1,375	
Swarms of Bees	469		
Honey	15,633 †	1,955	
Wool	20,250 †	3,375	
Milk	1,638,215 ‡	154,895	
Butter	293,828 †	67,720	
Eggs	511,760 ‡		
<b>Total</b>		<b>\$1,301,240</b>	
* Bushels.	† Pounds.	‡ Dozen.	
† Tons.	§ Gallons.		

Photo in heading: View of Jefferson City.

embraced in the particular piece and the character of improvements. There are 119,476 acres of this land. The larger portion, 249,600 acres, is at present uncultivated and may be bought at \$5 to \$15 an acre. There are 1,700 farms, of an average size of 132.2 acres. The aggregate, actual valuation is put at \$3,827,925. Farm production each year equals the land valuation.

**MANUFACTURES:**—Shoes, overalls, beer, wine, saddle trees, and book bindery products are the manufacturing output. A contributing element to the large manufacturing of Jefferson City is its transportation advantage. Freight and express consignments are called for and delivered without charge for drayage.



**TRANSPORTATION:**—Railroads: Missouri Pacific, main line, Bagnell Branch and River Route; Missouri, Kansas & Texas, and Chicago & Alton. There are forty passenger trains daily.

**SCHOOLS:**—Enumeration, 6,300; terms six to nine months. Over eighty thousand dollars have been spent recently to this end in Jefferson City alone. Schools have libraries and in addition thereto is the free circulation library, recent gift to the city by Andrew Carnegie. Lincoln Institute, State normal school for colored, is here.

**BANKS:**—There are five banks, with a total deposit of three million dollars.

**CHURCHES:**—Thirty-one, representing eleven Christian denominations, with a total membership of 10,000.

**WAGON ROADS:**—From the various directions into Jefferson City are turnpike wagon roads, footing a total of 30 miles. In addition are 200 miles of dirt roads.

**TOWNS:**—The incorporated towns are: Jefferson City, 9,664, elsewhere noted; Russellville, population 295, on the Bagnell branch of the Missouri Pacific railroad.

**NEWSPAPERS:**—Jefferson City State Tribune, Cole County Democrat, Missouri Volksfreund, Republican, Missouri School Journal, Post; Russellville Rustler; Centertown: Central Missouri Leader.



MISSOURI IS FIRST IN FRUIT.



**C**OOPER is upon the south bank of the Missouri river, half way across the State. Both vast and varied are its resources. It is long settled. Its history antedates the history of the State. Education is fostered. Academies and colleges are grounded firm and deep upon early years. In agriculture and live stock breeding the county is of leading importance. The first Shorthorn cattle in Missouri were imported to Cooper county. This breed of cattle now forms a large share of almost one million dollars

worth of cattle shipped out annually. Horses are a large item of export, and corn shipments exceed a million dollars a year. Manufactures are active. Earthenware, leather and flour are made. Boonville flouring mills are of the largest in the State. Clay for earthenware work, coal and some lead are mined. Sand taken from the Missouri river at Boonville is shipped widely. A model State institution located at Boonville is the reformatory—Missouri Training School for Boys.

**POPULATION:**—White, 18,999; colored, 3,533; American born, 21,445; foreign born, 1,087; total, 22,532. Farm homes owned, 2,009; rented, 644; other homes owned, 983; rented, 1,029; total families, 4,665.

**FINANCE:**—County tax, 65 cents on one hundred dollars valuation; school tax from 15 cents to \$1.05; average, 46 cents; total assessed valuation, \$8,485,816; assessments based upon one-third actual valuation of property. No indebtedness.

**TIMBER:**—Appeared upon the Missouri and Lamine rivers, small creeks and their tributaries. The growth was large, indicating fertility of soil. Species embraced oaks, walnut, elm, sycamore, linwood, sugar tree and cottonwood. The most of the commercial timber has been removed, though an occasional strip is found.

**MINERALS:**—Clays constitute the main mineral. They range in composition from that suitable for pressed brick to kaolin. Coal has been mined within the county. A few small mines now operate through

COOPER COUNTY'S 1902 CROP			
	ACRES	PRODUCT	VALUE
Corn	85,195	4,046,768 *	\$1,193,695
Wheat	60,951	1,340,920 *	737,505
Oats	9,738	301,880 *	80,000
Hay	23,463	39,686 †	299,140
Forage	1,155	1,445 †	7,225
Broom Corn	27	18,500 ‡	370
Clover Seed		2,515 *	11,085
Grass Seed		300 *	540
Tobacco	27	18,900 ‡	1,795
Potatoes	871	113,230 *	36,235
Vegetables	895		49,565
Total			\$2,420,155
LIVE STOCK AND PRODUCTS			
KIND	NUMBER	VALUE	
Cattle	29,995	\$ 909,835	
Horses	9,173	611,535	
Mules	4,950	371,250	
Asses and Jennets	111	13,320	
Sheep	12,083	36,250	
Swine	57,225	572,250	
Chickens	198,229 †		
Turkeys	10,108	142,015	
Geese	5,678 †		
Ducks	2,352 †		
Swarms of Bees	2,089	4,415	
Honey	69,633 ‡	8,705	
Wool	55,515 ‡	9,250	
Milk	2,041,476 §	158,650	
Butter	360,580 †		
Eggs	494,504 †	99,325	
Total		\$3,026,800	
* Bushels.	† Pounds.	‡ Dozen.	
† Tons.	§ Gallons.		

Photos in heading: The Turn in the Road; M. K. & T. Railroad Bridge Across the Missouri River at Boonville.

the winter season. Building stone of limestone qualities is quarried for purposes local. Boonville is one of the largest sand shipping points in Missouri. The product is deposited by the river. Small quantities of lead ore have been found in the southern half of the county.

**LAND:**—Number of square miles, 562; acreage, 359,680, of which 264,760 acres are in a high state of cultivation. Number of farms, 2,664; average size, 127 acres; actual valuation, \$10,849,350. There are three kinds of soil: alluvium, adjoining in a narrow strip the river; brown loam of loess character, most extensive of the three kinds; and red limestone clay, bearing flint substance, found in the south half of the county. The bottom land farms are finely improved and sell at \$70 an acre. Hill and prairie farms range generally in price from \$45 to \$50. Rough, timbered lands, \$25 to \$30 an acre.

**FRUIT LANDS:**—Cooper and St. Louis counties stand alone in combining in considerable quantity the two kinds of soil which have made Missouri renowned as a fruit State. The red limestone clay is the soil upon which the Louisiana nurseries and the Ozark bordering orchards are founded. The brown loam loess is the soil which has made northwest Missouri excel in apple production.

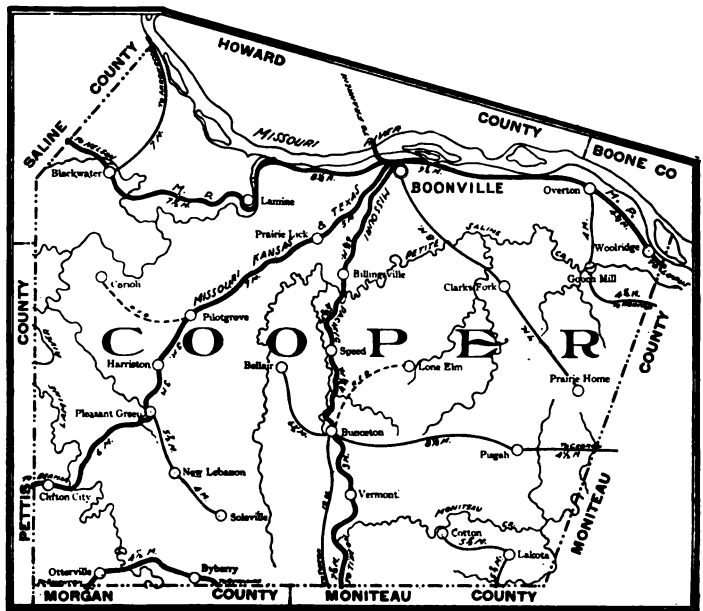
**MANUFACTURES:**—Earthenware, leather and flour are the principal manufactured products. Some native lumber is sawed by portable mills, and ship-stuff and other feed is ground by small mills, found in nearly every town.

**TRANSPORTATION:**—Four railroads touch the county: Missouri, Kansas & Texas crosses northeast to southwest; Missouri Pacific River Route from Kansas City to St. Louis crosses east to west; a branch of the Missouri Pacific runs south from Boonville to Versailles, in Morgan county; and the Missouri Pacific main line skirts the southern border.

**SCHOOLS:**—One of the strongest features of the county. Boonville High School is approved by the State University. Kemper Family School for boys, at Boonville. At Boonville is also Megquier Seminary for young women, and at Pilot Grove is the Pilot Grove Collegiate Institute.

**TOWNS:**—Boonville, population, 4,377, county seat, old river town, supported by farming, manufacturing, mineral working, shipping interests. Has brick paved streets, electric lights, water-works, gas and other modern improvements. Bunceton, population 856; Pilot Grove, 631, and Otterville, 384, are other towns with modern improvements. Blackwater, 285; Prairie Home, 196. All towns are most largely indebted to agriculture for support.

**NEWSPAPERS:**—Boonville Advertiser, Missouri Democrat, Central Missouri Republican, Western Christian Union, Central Missourier, Advance, Wasp; Pilot Grove Enterprise; Bunceton Eagle, Tribune; Otterville Mail; Blackwater News.



MISSOURI RIVER BLUFF.



## CRAWFORD

**C**RAWFORD is located seventy-five miles southwest of St. Louis, upon the Frisco railroad, and in the second tier of counties south of the Missouri river. Commercially,

its leading interests are mineral. It ships more iron pyrites than any other county in the State. Land surface is broken and rock bearing and embraces 710 square miles, 454,400 acres, of which but 100,045 acres are cultivated. These together with contingent grazing lands are estimated to be worth \$3,387,290.

**POPULATION:**—White, 12,911; colored, 48; American born, 12,472; foreign born, 487; total, 12,959. Farm homes owned, 1,376; rented, 548; town homes owned, 304; rented, 340; total families, 2,568.

**TIMBER AND RAILROAD TIES:**—White oak, post oak, burr oak, black-jack, in the main, with scattering hickory and walnut. White oaks were of large size, giving rise to the railroad tie industry, which has for many years been a leading source of income. Other timbers were of small individual size. Land cut twenty to thirty cords of wood per acre, worth \$1.75 to \$2 for firewood.

**MINERALS:**—Iron pyrites, coal, lead, fire clay, kaolin, limestone, sandstone and granite are found. Cherry Valley iron mine, four miles south of Steelville, and one two miles west of Steelville, are in active operation. Outputs are hauled to Sligo Smelter, in Dent county. Coal at a depth of sixty feet is found at Cook's Station and at Bourbon. Vein is said to be in places eight feet through. Lead is mined near Bourbon and Sullivan. Near Butts' Postoffice a lead boulder containing 576 cubic feet has been located at forty-five feet depth. Granite deposits exist near Berryman.

**LAND:**—One-fourth is fenced. The balance is free stock range. Farms are located chiefly in the northern one-half, though they occupy valleys throughout the southern portion. Soil in the bottoms of Meramec river, Huzzah, Courtois, Dry, Crooked, Little Bourbeuse, Brazil and Brush creeks is black alluvial formation; hill land soil is clay and the surface of the latter bears flint rock. Improved farms are selling at \$8 to \$40 in these proportions: one-fifth, \$8 to \$15; three-fifths, \$15 to \$25; one-fifth \$25 to \$40. Highest priced land is represented by 16,000 acres of Meramec river bottoms, and a lesser strip of upland north of Cuba. Three-fourths, wild land, approaches mountainous. Its value lies in mineral prospects, timber for firewood, and grazing purposes. It can be had in any quantity at \$2 to \$5 an acre, an occasional piece with promising mineral findings being held at \$10. One-fourth of this is held by non-resident speculators.

CRAWFORD COUNTY'S 1902 CROP

	ACRES	PRODUCT	VALUE
Corn	28,847	992,145 *	\$ 872,055
Wheat	17,759	284,145 *	167,645
Oats	2,624	65,600 *	21,865
Hay	12,567	18,850 †	141,375
Forage	430	500 †	2,500
Broom Corn	53	26,500 †	730
Tobacco	41	29,100 †	2,910
Potatoes	891	37,145 *	17,890
Vegetables	450		18,575
<b>Total</b>			<b>\$745,485</b>

LIVE STOCK AND PRODUCTS

KIND	NUMBER	VALUE
Cattle	15,605	\$ 390,125
Horses	4,015	240,900
Mules	1,840	119,600
Asses and Jennets	80	7,200
Sheep	8,270	24,810
Swine	20,790	207,900
Chickens	66,548	
Turkeys	785	42,505
Geese	2,208	
Ducks	1,477	
Swarms of Bees	632	1,789
Honey	21,067 †	2,631
Wool	24,950 †	4,158
Milk	1,220,864 \$	83,300
Butter	237,621 †	
Eggs	365,180 †	45,645
<b>Total</b>		<b>\$1,170,655</b>

\* Bushels. † Pounds. † Dozen.  
† Tons. † Gallons.

**MANUFACTURES:**—Flour and staves are manufactured. Flouring mills

*Photos in heading: Crawford County Goat Ranch; Water Mill.*

are located at Steelville, Cuba, Wilsons, Davisville, Jacobston, Bourbon. Staves are made at Cuba and Dillard.

**RAILROADS:**—Frisco main line St. Louis to the southwest has 26.01; Steelville branch Frisco 31.95; and the Sligo & Eastern 9 miles of roadbed within the county.

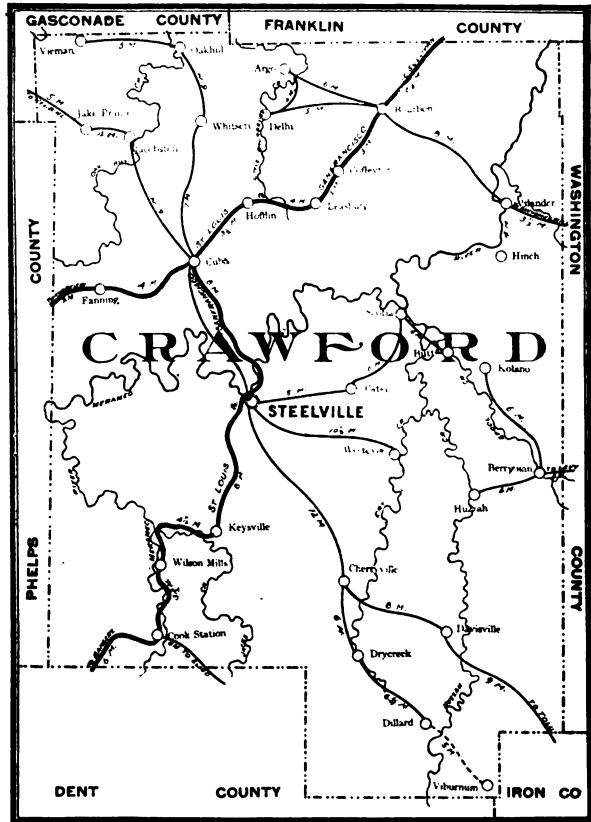
**DISTRICT HIGH SCHOOL AND CHURCHES:**—Steelville is the location of a high school supported by surrounding districts. Cuba has high school. Cuba has Presbyterian, United Presbyterian, Baptist, Methodist Episcopal, Episcopal and Catholic churches; Steelville has Cumberland Presbyterian, Methodist South and Baptist denominational structures.

**TOWNS:**—Steelville, county seat, Cuba, Bourbon, Leasburg are leading towns, supported by agriculture and mining.

**RAINBOW TROUT:**—August Lauth, 6 miles west of Cuba, raises rainbow trout. Project started 5 years ago; product sells at 40 to 50 cents per pound. Ponds are furnished from Elm Spring.

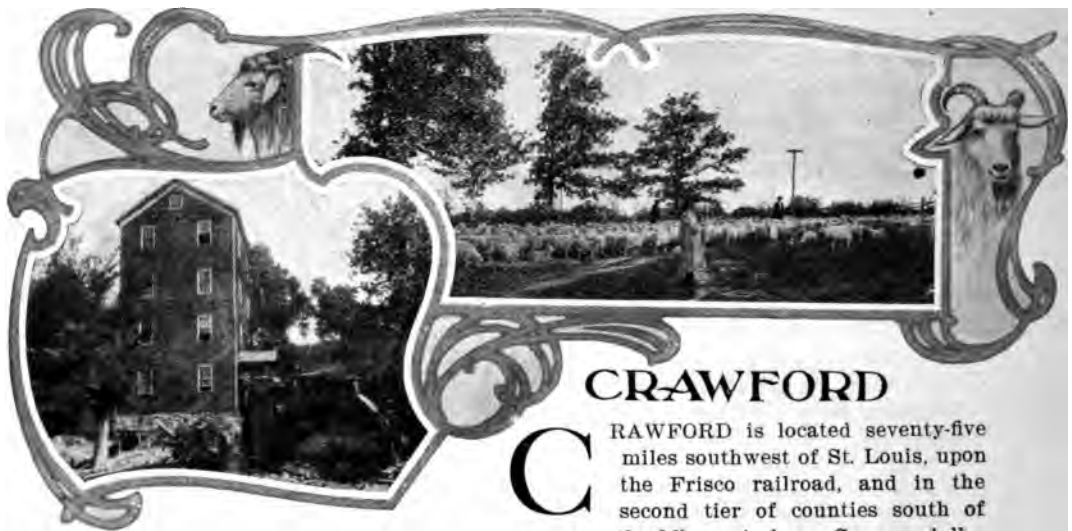
**FINANCE:**—County tax 62; school tax from nothing to \$1.15; average 46; total assessed valuation \$3,069,135.11; assessed valuation of real valuation 40 per cent; county debt, none; no township debt. One school district did not levy tax last year, having on hands sufficient funds to support term.

**NEWSPAPERS:**—Steelville Democrat, Crawford County Mirror; Cuba Telephone.



IN THE CLEAR, COOL HEAD WATERS OF THE MERAMEC.





## CRAWFORD

**C**RAWFORD is located seventy-five miles southwest of St. Louis, upon the Frisco railroad, and in the second tier of counties south of the Missouri river. Commercially,

its leading interests are mineral. It ships more iron pyrites than any other county in the State. Land surface is broken and rock bearing and embraces 710 square miles, 454,400 acres, of which but 100,045 acres are cultivated. These together with contingent grazing lands are estimated to be worth \$3,387,290.

**POPULATION:**—White, 12,911; colored, 48; American born, 12,472; foreign born, 487; total, 12,959. Farm homes owned, 1,376; rented, 548; town homes owned, 304; rented, 340; total families, 2,568.

**TIMBER AND RAILROAD TIES:**—White oak, post oak, burr oak, black-jack, in the main, with scattering hickory and walnut. White oaks were of large size, giving rise to the railroad tie industry, which has for many years been a leading source of income. Other timbers were of small individual size. Land cut twenty to thirty cords of wood per acre, worth \$1.75 to \$2 for firewood.

**MINERALS:**—Iron pyrites, coal, lead, fire clay, kaolin, limestone, sandstone and granite are found. Cherry Valley Iron mine, four miles south of Steelville, and one two miles west of Steelville, are in active operation. Outputs are hauled to Sligo Smelter, in Dent county. Coal at a depth of sixty feet is found at Cook's Station and at Bourbon. Vein is said to be in places eight feet through. Lead is mined near Bourbon and Sullivan. Near Butts' Postoffice a lead boulder containing 576 cubic feet has been located at forty-five feet depth. Granite deposits exist near Berryman.

**LAND:**—One-fourth is fenced. The balance is free stock range. Farms are located chiefly in the northern one-half, though they occupy valleys throughout the southern portion. Soil in the bottoms of Meramec river, Huzzah, Courtois, Dry, Crooked, Little Bourbeuse, Brazil and Brush creeks is black alluvial formation; hill land soil is clay and the surface of the latter bears flint rock. Improved farms are selling at \$8 to \$40 in these proportions: one-fifth, \$8 to \$15; three-fifths, \$15 to \$25; one-fifth \$25 to \$40. Highest priced land is represented by 16,000 acres of Meramec river bottoms, and a lesser strip of upland north of Cuba. Three-fourths, wild land, approaches mountainous. Its value lies in mineral prospects, timber for firewood, and grazing purposes. It can be had in any quantity at \$2 to \$5 an acre, an occasional piece with promising mineral findings being held at \$10. One-fourth of this is held by non-resident speculators.

CRAWFORD COUNTY'S 1902 CROP

	ACRES	PRODUCT	VALUE
Corn	28,847	992,145 *	\$ 372,055
Wheat	17,759	284,145 *	167,645
Oats	2,624	65,600 *	21,865
Hay	12,567	18,850 †	141,375
Forage	430	500 †	2,500
Broom Corn	53	26,500 †	730
Tobacco	41	29,100 †	2,910
Potatoes	391	37,145 *	17,890
Vegetables	450		18,575
<b>Total</b>			<b>\$745,485</b>

LIVE STOCK AND PRODUCTS

KIND	NUMBER	VALUE
Cattle	15,605	\$ 390,125
Horses	4,015	240,900
Mules	1,840	119,600
Asses and Jennets	80	7,200
Sheep	8,270	24,810
Swine	20,790	207,900
Chickens	66,548	
Turkeys	735	42,595
Geese	2,208	
Ducks	1,477	
Swarms of Bees	632	1,789
Honey	21,067 †	2,633
Wool	24,950 †	4,158
Milk	1,220,864 \$	83,300
Butter	237,621 †	
Eggs	365,180 †	45,645
<b>Total</b>		<b>\$1,170,655</b>

\* Bushels. † Pounds. † Dozen.  
† Tons. † Gallons.

**MANUFACTURES:**—Flour and staves are manufactured. Flouring mills  
Photos in heading: Crawford County Goat Ranch; Water Mill.

are located at Steelville, Cuba, Wilsons, Davisville, Jacobston, Bourbon. Staves are made at Cuba and Dillard.

**RAILROADS:**—Frisco main line St. Louis to the southwest has 26.01; Steelville branch Frisco 31.95; and the Sligo & Eastern 9 miles of roadbed within the county.

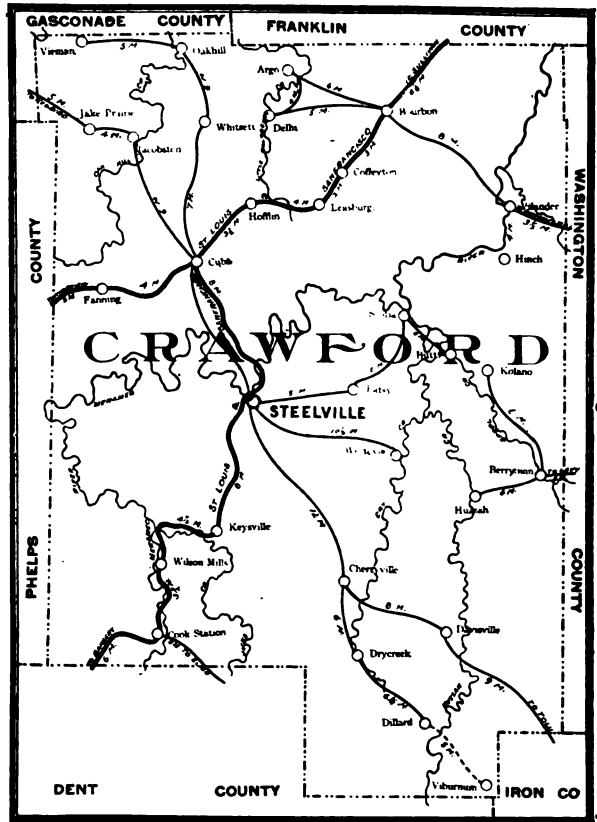
**DISTRICT HIGH SCHOOL AND CHURCHES:**—Steelville is the location of a high school supported by surrounding districts. Cuba has high school. Cuba has Presbyterian, United Presbyterian, Baptist, Methodist Episcopal, Episcopal and Catholic churches; Steelville has Cumberland Presbyterian, Methodist South and Baptist denominational structures.

**Towns:**—Steelville, county seat, Cuba, Bourbon, Leasburg are leading towns, supported by agriculture and mining.

**RAINBOW TROUT:**—August Lauth, 6 miles west of Cuba, raises rainbow trout. Project started 5 years ago; product sells at 40 to 50 cents per pound. Ponds are furnished from Elm Spring.

**FINANCE:**—County tax 62; school tax from nothing to \$1.15; average 46; total assessed valuation \$3,069,135.11; assessed valuation of real valuation 40 per cent; county debt, none; no township debt. One school district did not levy tax last year, having on hands sufficient funds to support term.

**NEWSPAPERS:**—Steelville Democrat, Crawford County Mirror; Cuba Telephone.



IN THE CLEAR, COOL HEAD WATERS OF THE MERAMEC.



DADE COUNTY'S 1902 CROP			
	ACRES	PRODUCT	VALUE
Corn	68,078	2,042,340 *	\$ 648,885
Wheat	98,516	712,545 *	391,900
Oats	12,629	454,645 *	120,480
Hay	15,432	23,150 †	138,900
Forage	1,535	2,045 †	10,225
Flax	2,846	11,384 *	11,840
Broom Corn	94	51,700 †	1,420
Clover Seed		95 *	530
Grass Seed		9,000 *	14,400
Tobacco	17	11,050 †	1,105
Potatoes	564	56,450 *	19,740
Vegetables	875		30,965
<b>Total</b>			<b>\$1,393,840</b>
LIVE STOCK AND PRODUCTS			
KIND	NUMBER	VALUE	
Cattle	21,144	\$ 581,460	
Horses	8,290	493,800	
Mules	2,529	177,030	
Asses and Jennets	71	6,380	
Sheep	4,158	12,475	
Swine	29,832	290,320	
Chickens	120,032		
Turkeys	4,355	107,705	
Geese	2,052		
Ducks	3,449		
Swarms of Bees	1,047	4,030	
Honey	51,900 †	6,860	
Wool	17,850	2,975	
Milk	2,079,022 †	121,775	
Butter	379,926 †		
Eggs	746,730	93,340	
<b>Total</b>		<b>\$1,906,160</b>	
* Bushels.	† Pounds.	Dozen.	
† Tons.	\$ Gallons.		

**I**N natural resources, Dade presents wide diversity. It is situate in the second tier of counties east of Kansas, and is third north of Arkansas. Horticulturally, it claims the climate which has embellished the Big Red Apple; agriculturally, it is well up in corn and wheat; for live stock, its blue grass acreage makes it adaptable; minerally, it possesses beds of blacksmith coal, grindstone, iron ore, stone for lime manufacture, kaolin and kindred clays, and zinc. The southwest corner of Dade adjoins the northeast corner of Jasper county, which produces more zinc than any other mining district. There are 500 square miles of land equivalent to 320,000 acres, 207,537 acres of which are arable. Number of farms is 2,732, of an average size of 107.8 acres, valued at \$4,008,918.

**POPULATION:**—White, 17,831; colored, 294; American born, 17,777; foreign born, 348; total, 18,125. Farm homes owned, 1,658; rented, 1,028; other homes owned, 636; rented, 478; total families, 3,800. In vicinities of Mienert and Lockwood are German population.

**FINANCE:**—County tax, 40 cents on one hundred dollars; school tax from 10 cents to \$1.10; average, 61 cents; assessed valuation, \$4,065,960; assessed valuation per cent of real valuation, 40; county debt \$22,500; no township debt.

**TIMBER:**—One-half was originally timbered with elm, all varieties of oak, sycamore, ash, hickory, maple, cottonwood, linden, and less prominent varieties. In the valleys growth was up to two and one-half feet individual size; upon uplands appeared much scrub

*Photos in heading: Greenfield Street Scene; Packing Fruit; Coal Mining.*

growth. Stationary saw mill operates at Greenfield. One-half timber removed.

**MINERALS:**—At present the largest mineral income is from lime, manufactured at Everton, where are deposits of limestone suitable. Coal of average thirty-inch thickness is mined in winter at Sylvania. Mines are located high; entered by drift; twelve miles from railroad. Annual production, 5,180 tons. Coal is underlaid with clays of various value. Kaolin is found near Everton. Pits are not operated. Grindstone is deposited near Sylvania; iron ore testing sixty-six per cent, is surface-mined at Emmett, which town is in hope of a smelter. Unbounded deposits of limestone are near South Greenfield. It is said to be much similar to the famous Carthage white limestone. Lead and zinc are mined in a small way near Corry and Dadeville. Several cars of lead and zinc have been shipped.

**LAND:**—Surface of Dade county is one-half rolling prairie and one-half hill and bottom land. Western one-half is a billowy prairie, broken only by timber strips which skirt streams. Eastern two-thirds is chiefly hill land, with considerable stream bottom acreage. Portion embraces three large and many small prairies. Largest centers at Pennsboro; one surrounds Emmett and the third embraces one-half a township in the northeast corner of county. Uplands are generally of long, gradual ascent type, though along streams north of Greenfield, are some cedar bluffs several hundred feet in height, and of precipitous inclination. There are about 1,500 acres in this one body, agriculturally waste land. Soil of county is of two general classes: red clay, and black loam. Red soil is wheat-adapted and is especially strong as drought resisting. Land is almost entirely owned by residents. Prices exist as follows: Ten per cent of farms at \$7 to \$15 an acre; seventy per cent at \$20 to \$30; fifteen per cent at \$30 to \$40; five per cent at \$40 to \$50, the last being located within close distance of Lockwood, Greenfield, Everton, Dadeville, and in the Pennsboro prairie.

**MANUFACTURES:**—White limestone at Everton constitutes basis of county's largest single plant. Creamery products, flour and corn meal are made. Creameries located at Lockwood and Meinert. Greenfield has a 150-barrel flour mill; custom mills at Everton, Comet, Hulston and Selgbert.

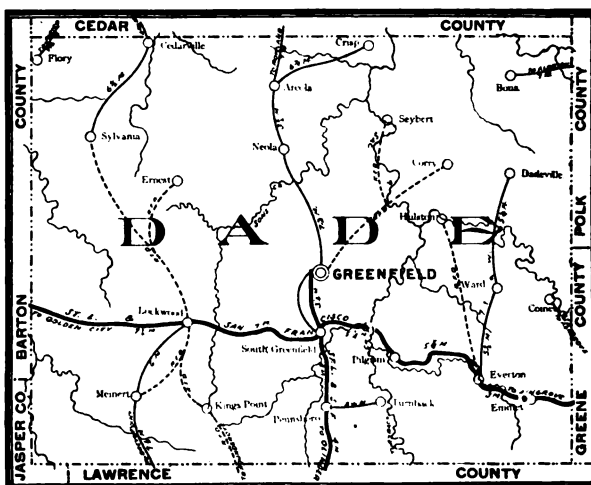
**TRANSPORTATION:**—Frisco, Springfield to Kansas, 29.34; Aurora-Greenfield branch of Frisco, 10.77 miles, taxed.

**HIGH SCHOOLS:**—At Greenfield and at Everton. Latter is central high school, supported by several districts.

**WATER:**—Artesian well at Comet. Living water averages ten to thirty feet depth. Streams are clear and swift, supplied by springs.

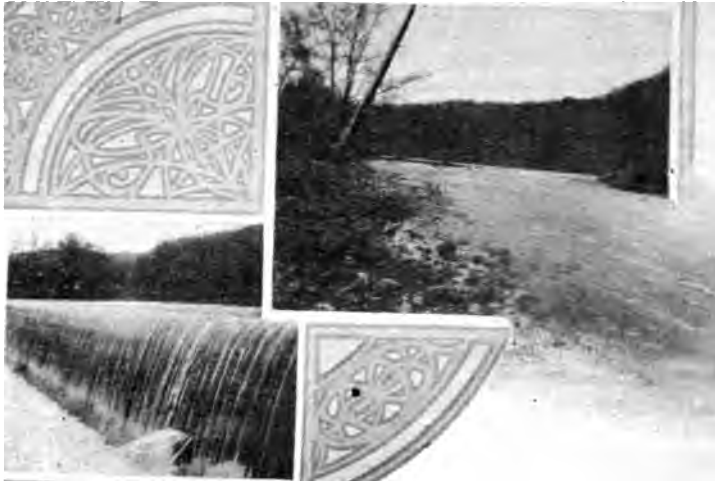
Largest commercial orchard in Dade county contains 254 acres, near Everett. Small orchards are numerous.

**NEWSPAPERS:**—Greenfield Vedette, Advocate; Lockwood Times; Everton, Dade County Journal; Dadeville Miner.



SAC RIVER, DADE COUNTY.

# DALLAS



**D**ALLAS, fourth county east of Kansas and half way between the Missouri river and Arkansas, embraces, in its western portion, some of the best farms in Missouri, while in the eastern portion land is largely timbered and undeveloped. Its topography varies from undulating prairie, to a mountainous surface. A spur of the Ozark mountains breaks through the northeastern boundary and extends almost to the south extreme. County contains 530 square miles of land, or 339,200 acres.

125,231 acres of which are cultivated. Number of farms 2,397, average size thereof 107.5 acres; in actual aggregated value \$2,149,320. Corn, wheat, hay, vegetables of all varieties, apples, berries, milk and butter are produced upon most farms. In horse and mule production the county ranks well up.

**POPULATION:**—White, 13,892; colored, 11; American born, 13,806; foreign born, 97; total, 13,903. Farm homes owned, 1,771; rented, 635; other homes owned, 231; rented, 171; total families, 2,808.

**FINANCE:**—County tax .50 on one hundred dollars valuation; school tax from .10 to 1.05, average .52 1-2; total assessed valuation \$2,098,477; assessed valuation per cent of real valuation 75; county debt \$6,000; no township debt.

**TIMBER:**—Four-fifths was primevally covered with white oak, red oak, post oak, walnut, hickory, and black-jack. Growth was larger in west fourth and the east and northeast grew much undergrowth and scrub timber. One-half of county is now clean shaven of timber, being probably one-fifth, in the northeast corner, that has not been cut over. Inaccessibility owing to lack of railroad, and the rough character of the section is responsible for its less ready development. A few portable saw mills turn out native lumber at \$1.50; cordwood is worth \$2.

**LEAD MINING:**—One paying lead mine is operated at Leadmine, small inland town, twenty-five miles from

DALLAS COUNTY'S 1902 CROP			
	ACRES	PRODUCT	VALUE
Corn	41,042	1,272,302 *	\$ 375,390
Wheat	13,572	203,580 *	111,970
Oats	6,437	180,925 *	42,645
Hay	16,160	24,240 †	121,200
Forage	3,005	3,755 †	18,775
Flax	20	120 *	120
Broom Corn	15	7,500 †	205
Clover Seed		230 *	1,250
Grass Seed		700 *	1,260
Tobacco	64	44,800 †	4,255
Potatoes	543	67,975 *	21,720
Vegetables	590		22,155
Total			\$720,925
LIVE STOCK AND PRODUCTS			
KIND	NUMBER	VALUE	
Cattle	14,473	\$ 361,825	
Horses	6,270	376,740	
Mules	1,697	110,305	
Asses and Jennets	68	6,120	
Sheep	9,537	28,610	
Pigs	21,105	211,050	
Chickens	89,512		
Turkeys	3,870	55,705	
Geese	4,285		
Ducks	1,937		
Swarms of Bees	837	2,025	
Honey	27,900 †	3,490	
Wool	30,543 †	5,090	
Milk	1,596,778 †	104,340	
Butter	264,202 †		
Eggs	451,500 †	56,425	
Total		\$1,321,735	
* Bushels.	† Pounds.	Dozen.	
† Tons.	\$ Gallons.		

Photos in heading: Scenes on Big Niangua River.

nearest railroad point. Lead prospects extend over one-third of the county. Iron, jack, tiff, kaolin and clays of various kinds and colors exist. Limestone bluffs are frequent along streams and in northeast section are several caves unexplored.

**LAND:**—Is of three distinct characters. Prairie embraces one-fifth of the county; long hill land describes three-tenths; and rough, broken land covers almost entirely the eastern half. There are three large prairies; Four Mile Prairie, containing ten square miles just north of Buffalo; Buffalo Head Prairie, south and southwest of Buffalo to the extent of 25 square miles; Stafford Prairie in extreme southwest corner. Best river bottom lands are along Big Niangua and Little Niangua rivers, and along Greasy creek. In the southeast quarter of the county is a large area of high, level, timbered land denominated flatwoods. Soil is as varied as the surface. River and creek bottoms are black alluvial and the prairies are generally a black prairie loam of one to three feet in depth. Hill land is chiefly clay, which soil excels even bottom land for wheat growth. Very few tracts of Dallas county land are in the hands of speculators. These few are in the rough, unimproved, mineral bearing belt. One-third of the county, lying within the east half, and more largely in the northeast, is unimproved land, 11,800 acres of which are subject to homestead at \$1.25 an acre. The balance thereof can be bought for \$5 or less per acre. Two-thirds is improved, some of the valley and prairie farms having fine improvements. One-half of this portion may be bought for less than \$15 an acre; 2,500 acres of remaining portion, situate in the vicinities of Buffalo and Olive will bring \$40 to \$50. The balance ranges from \$15 to \$30. A close estimate by townships reveals a price average for the west one-half of \$14, for the east half \$4 an acre.

**MANUFACTURED PRODUCTS:**—Brooms at Longland; native lumber and flour at several country mills. Brick is moulded and burned as locally demanded.

**RAILROAD GRADING:**—A well graded railroad bed, abandoned, connects Buffalo with Bolivar, Polk county.

**SCHOOLS:**—In western half of county school buildings are in easy access of all homes. Buffalo has a six-room graded school, building recently erected at cost of \$10,000. Churches are Protestant.

Estimated one spring to every eighty acres of land. Bennett's Spring on Niangua river is a favorite camping place in summer.

**FISHING:**—Unsurpassed in clear, cool spring water of Niangua rivers. Game fish are plentiful. Giggling is a sport indulged in largely.

**NEWSPAPERS:**—Buffalo Record, Reflex.



DALLAS COUNTY FARM.



**D**AVIESS is the third county east of the Missouri river and in the second tier south of Iowa. It is 250 miles northwest of St. Louis, 75 miles north of Kansas City, 50 miles east of St. Joseph. In square miles it measures 576; in acres, 368,640, of which 279,050 are in high state of cultivation. Farms number 3,308; average size, 106.9, of estimated actual value, \$12,283,722. Agriculture and stockraising are chief pursuits. In rye production Daviess leads the State. Last year corn surplus amounted to almost two millions of dollars, while at the same time income from cattle exported footed one and one-half millions, horses and mules brought over one million and hogs three-quarters of a million. Blue grass, timothy, and clover hay surplus made an income of one-half million dollars. Blue grass is the natural grass.

**STONE:**—Blue limestone of good quality is found along the bluffs of Grand river. At Jameson the Wabash railroad maintains a rock crusher employing one hundred men. The buildings of Gallatin are finished in the same stone, quarried near town. Coal in paying quantities is supposed to underlie in numerous places. A two-inch vein was recently discovered at three-foot depth, one mile south of Gallatin.

**TIMBER:**—It originally covered fully one-fourth of the land. Leading varieties are black oak, post oak, white oak, hickory, elm, and black walnut, confined to the streams. Mills are portable. Timber remains sufficient for stock shade, firewood and rough plank purposes.

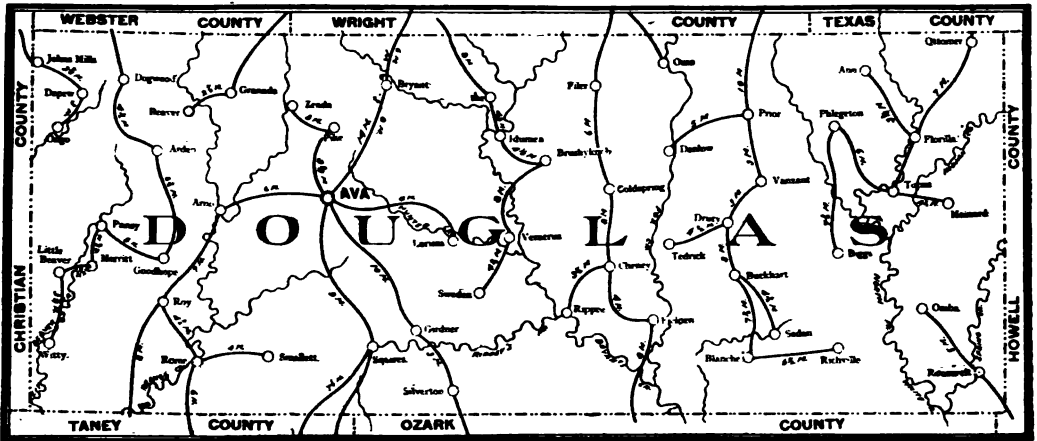
**TOPOGRAPHY AND SOIL:**—Grand river flows diagonally through Daviess county from northwest to southeast. With its numerous tributaries it forms an ideal drainage system, a feature favorable to stock raising. Three-fourths of the land is prairie; four-fifths of the remainder have been cleared of timber. The northeast one-half is generally undulating, growing more rolling as one proceeds west. This is nearly all prairie. Herein, improved farms are worth \$40 to \$55, with an occasional one at \$75, owing to high improvement. Timbered rough lands in vicinities of Madaline and Gallatin are to be had at \$30 to \$35 in the former and \$35 to \$45 in the latter. Grand river bottoms are generous width. Farms sell at \$35 to \$50. The soil is black loam with limestone and clay subsoil. Northwest of Gallatin, prairie land embraces two townships where farms are held at \$40 to \$60; adjoining this on the west is a strip of timbered land worth \$35 to \$45. That portion bounded by the Rock Island railroad and Grand river bottom on the north, almost by township, alternates timber and prairie, beginning with the latter on the west. Price of prairie, \$40 to \$50; timber, \$30 to \$40. Upland soil is mulatto up to three feet in depth, over clay subsoil. Bottom land soil is black

DAVIESS COUNTY'S 1902 CROP			
	ACRES	PRODUCT	VALUE
Corn	118,760	5,700,480 *	\$1,795,650
Wheat	4,769	124,515 *	71,595
Oats	4,315	172,600 *	44,875
Hay	48,775	82,920 †	414,600
Forage	7,640	10,185 †	50,925
Broom Corn	119	65,450 †	1,800
Clover Seed		160 *	880
Grass Seed		9,300 *	14,415
Tobacco	48	43,200 †	4,320
Potatoes	949	113,880 *	27,330
Vegetables	1,015		51,870
Total			\$2,478,260
LIVE STOCK AND PRODUCTS			
KIND	NUMBER	VALUE	
Cattle	44,725	\$1,453,560	
Horses	14,490	366,000	
Mules	2,798	209,850	
Asses and Jennets	92	9,200	
Sheep	15,738	52,460	
Swine	72,996	729,960	
Chickens	191,952		
Turkeys	6,228	154,215	
Geese	4,172		
Ducks	2,467		
Swarms of Bees	3,805	9,250	
Honey	126,833 †	15,855	
Wool	58,000 †	9,665	
Milk	3,499,526 †	191,590	
Butter	566,802 †		
Eggs	1,231,980	154,000	
Total		\$3,955,605	
* Bushels.	† Pounds.	Dozen.	
† Tons.	§ Gallons.		

Photo in heading: A Land of Sleek, Meek-Eyed Herds.

rate of about two and one-half million feet annually. White oak abounds in central part of county and there is also a large body in the west end and on north hill sides throughout the county; estimated to embrace 20 per cent of timber. Twenty-four per cent is black oak, largest growth found near Ava and Squires. Black-jack grows everywhere to extent of ten per cent. Post oak, five per cent; hickory, two per cent; walnut, one per cent.

**MINERALS:**—Twenty-five per cent of the county bears mineral indication. Lead, zinc, copper, and iron are found. Lack of railroad transportation leaves the prospects for mineral undeveloped. Limestone and sandstone are found along all streams.



**LAND:**—Soil is gravelly and often stone-bearing, but possesses considerable fertility. By proper rotation, profitable cereal growing is followed. Clover and grasses grow luxuriantly, even where too rough or stony for wheat or corn. Stock raising most nearly accords with the county's natural adaptability. Of the land in cultivation, bottoms sell for \$15 an acre; best ridge or upland valleys, \$10; less level ridge land, \$5. Wild timbered lands range from \$1.25 an acre to \$5. Estimated that \$1.50 an acre would buy nearly all wild acreage. There are 6,745 acres owned by the United States government, which holds them subject to homestead at \$1.25 an acre.

**FRUIT LANDS:**—Soil, subsoil, climate and one-half of the topography are favorable to fruit growing. Douglas borders the west side of Howell county, which grows more peaches than any other Missouri county.

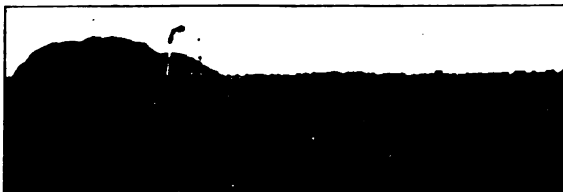
**MANUFACTORIES:**—Are of local size and importance. Flouring mills, saw mills, tannery, planing mills, shingle factories, and wool carding machines.

**PUBLIC ROADS:**—Wagon roads are a feature mention-worthy. Natural gravel forestalls the mud.

**CAVES AND SCENIC POINTS:**—Brown's Cave, near Rippey, fifteen miles east of Ava, possesses interest for geologists and sightseers. Between Ava and Veracruz, are the highest mountains in the county.

**TOWNS:**—Ava, county seat, has good flouring mill, feed mill and tannery. Freight comes by wagon via Mansfield, in Wright county, nearest railroad point, fifteen miles away. Rome, Topaz, Squires, Denlow, Bryant, Pansy, Winfield, Larissa, Veracruz and Loftin are farming centers, having custom flouring and feed mills.

**NEWSPAPERS:**—Ava: Douglas County Republican; Ava: Douglas County Herald.







**D**EKALB is purely a general farming and stock raising county. It is located thirteen miles east of St. Joseph and fifty-five miles north of Kansas City. The general topography is that of a high, rolling prairie, varied only by infrequent streams of the size of creeks. County contains 440 square miles of land surface, 281,600 acres, of which 222,284 acres are yielding hay and cereals. There are 2,377 farms of an average size of 110 acres each, valued, in total, at \$9,605,943. Corn exports annually exceed one and one-third millions of dollars' income; cattle a close second in importance. A great many potatoes are grown.

**POPULATION:**—White, 14,291; colored, 127; American born, 13,975; foreign born, 443; total, 14,418. Farm homes owned, 1,571; rented, 735; other homes owned, 567; rented, 359; total families, 3,232.

Latter Day Saints have a prosperous colony in southwestern part of county. Several hundred Germans are scattered over the county.

**FINANCE:**—County tax, 40 cents; township, 10 cents; school tax, from 30 cents to \$1.25; average, 54 cents; total assessed valuation, \$5,917,372; 25 per cent of real valuation. No county debt; no township debt.

**LAND, PRICE AND SOIL:**—With the exception of four areas embracing in total one-fourth of the land acreage, DeKalb county is a high prairie, generally of a sloping akin to the billowy; oftentimes undulating. Land ranges in price from \$30 to \$40 for the bulk. The broken, rocky, acreages adjoining Grindstone creek; the northwest one-fourth of the northwest one-sixth; the northwest one-fourth of the southwest township, and the balance adjoining Maysville, make up the quarter of the county which can be bought at \$15 to \$25 an acre. Highest priced land is in southeast section, where, near Cameron, in Caldwell county, because of its proximity to market, or near Osborn, because of its intrinsic value, it occasionally brings \$50 to \$60 and, rarely, \$75. Prairie soil is loam overlaying clay. Bottom land is alluvial, black in color, endless in depth, generally light in weight. Blue grass is indigenous to it all.

**TIMBER:**—One-fifth was originally white oak, black oak, ash, elm, hickory, and soft maple. One-third the amount was white oak. More than one-half has been cleared. Cordwood is yet shipped in small quantities from Maysville, Stewartsville and Weatherby. Portable mills supply local market with rough hardwood lumber.

**MINERALS:**—Grindstone rock, limestone and sandstone are found in the bluffs, which border Grindstone creek. It is not commercially used.

DEKALB COUNTY'S 1902 CROP			
	ACRES	PRODUCT	VALUE
Corn	102,868	4,114,320 *	\$1,296,010
Wheat	2,194	47,070 *	27,095
Oats	5,192	199,892 *	51,970
Hay	35,470	60,300 †	301,500
Forage	6,165	8,220 †	41,100
Broom Corn	210	115,500 †	3,175
Clover Seed		75 *	410
Grass Seed		1,350 *	2,095
Tobacco	6	5,400 †	540
Potatoes	969	145,650 *	34,885
Vegetables	790		49,080
Total			\$1,801,780
LIVE STOCK AND PRODUCTS			
KIND	NUMBER	VALUE	
Cattle	39,241	\$1,275,330	
Horses	10,625	706,065	
Mules	1,925	144,375	
Asses and Jennets	65	6,500	
Sheep	4,367	14,555	
Swine	62,664	626,640	
Chickens	140,484		
Turkeys	4,083	101,565	
Geese	8,513		
Ducks	2,724		
Swarms of Bees	2,704	6,700	
Honey	90,133 †	11,265	
Wool	19,100	3,185	
Milk	3,289,876 †	218,250	
Butter	509,494 †		
Eggs	776,520	97,090	
Total		\$1,213,540	
* Bushels.	† Pounds.	Dozen.	
† Tons.	§ Gallons.		

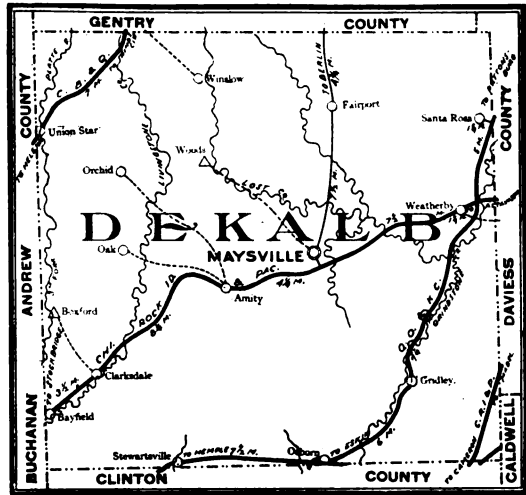
Photo in heading: Maysville Chautauqua.

**FLOUR AND BRICK:**—Flouring mills are the chief manufacturing concerns. Flour is made at Maysville, Osborn, Weatherby, Union Star and Clarksdale. Moulded brick are made as locally called for.

**TRANSPORTATION:**—Rock Island, 30.61; Hannibal & St. Joseph, 9.24; Chicago, Burlington & Quincy, 7.94; Kansas City, Peoria & Chicago, 20 miles of taxable railroad. Dirt roads are dragged and the largest county bridges are steel.

**SCHOOLS:**—Eighty-two school districts in DeKalb, each maintaining seven to nine months' terms annually. Maysville and Stewartville have graded schools, the former having eight rooms.

**WATER:**—Hard and soft drinking water is obtainable at twenty to sixty feet. Stock water is supplied from ponds and windmill wells. In rougher parts springs are numerous. No mineral springs.



**TOWNS:**—Maysville, county seat, population, 925; Stewartville, population, 616; Union Star, population, 439; Clarksdale, and Osborn are the principal towns. All are supported by farming. Towns are connected with each other and with rural districts by telephone, conducted upon co-operative plan.

**CHAUTAUQUA:**—The social event of DeKalb is an annual Chautauqua. It is held in mid-summer, and is attended by people from all over north-west Missouri. Men of national reputation discuss questions of general interest and a military band supplies music. People camp on the grounds.

**NEWSPAPERS:**—Maysville Herald, Pilot, Democrat; Clarksdale Journal; Osborn Enterprise; Stewartville Record; Union Star Herald.



SEPARATING THE CREAM FROM THE MILK. ST. JOSEPH DAIRYING TERRITORY.



CONVERTING CORN INTO CASH VIA LIVE STOCK LINE.

# DENT



**T**WENTY-NINE iron mines operate within the borders of Dent county. Iron and timber and agriculture are the supports of the people. At Sligo, in the northeastern part of the county, are furnaces which manufacture seventy tons of pig iron a day. Wood alcohol and charcoal are also manufactured here. Dent is situated third south of the Missouri river, ninety miles southwest of St. Louis. Its lay is uneven—mountainous. Its surface bears rocks except in the valleys. Originally the entire 720 square miles of its area was a forest of hard and soft woods, but 101,513 acres are now in cultivation. There are 1,748 farms, average size of which is 157.2 acres, including arable, pasture and timber lands. Farm lands are estimated to be actually worth \$2,307,556.

DENT COUNTY'S 1902 CROP			
	ACRES	PRODUCT	VALUE
Corn	26,655	698,375 *	\$249,800
Wheat	20,583	257,200 *	151,800
Oats	2,611	65,275 *	21,760
Hay	15,891	23,835 †	178,765
Forage	240	280 †	1,400
Broom Corn	10	5,000 †	140
Clover Seed		450 †	2,475
Tobacco	40	28,400 †	2,840
Potatoes	320	27,965 *	13,425
Vegetables	625		21,225
<b>Total</b>			<b>\$643,720</b>
LIVE STOCK AND PRODUCTS			
KIND	NUMBER	VALUE	
Cattle	14,850	\$ 371,250	
Horses	4,000	210,000	
Mules	1,680	100,800	
Asses and Jennets	45	4,050	
Sheep	7,620	22,860	
Swine	19,235	192,350	
Chickens	57,695 †		
Turkeys	1,539 †	20,790	
Geese	1,743 †		
Ducks	1,851 †		
Swarms of Bees	547	1,030	
Honey	18,233 †	2,279	
Wool	21,290 †	3,538	
Milk	1,177,564 \$ †	69,330	
Butter	236,509 †		
Eggs	277,570 †	34,635	
<b>Total</b>		<b>\$1,071,967</b>	
* Bushels.	† Pounds.	‡ Dozen.	
‡ Tons.	\$ Gallons.		

**POPULATION:**—White, 12,958; colored, 28; American born, 12,840; foreign born, 146; total, 12,986. Farm homes owned, 1,293; rented, 500; other homes owned, 280; rented, 438; total families, 2,511.

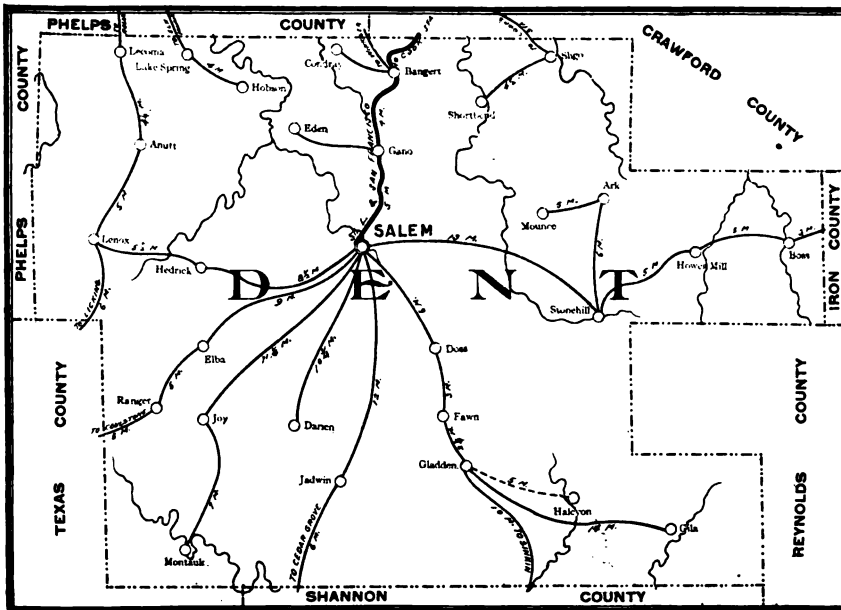
**FINANCE:**—County tax, 65 cents on one hundred dollars; school tax from 20 cents to \$1.20; average, 48 cents; assessed valuation, \$2,451,849; assessed valuation per cent of actual valuation, sixty-six and two-thirds; county debt, \$15,000; no township debt.

**TIMBER:**—Acreage bearing timber, 359,287; three-fourths of the timber footage is white oak, black oak, and black-jack, in equal quantities. White oak is found principally in the south, farthest from railroad and to a less greater extent in extreme northeast corner. Near the railroad it has been consumed in tie making. Black-jack and oak adhered to no special region, but intermingled over entire county. They are used extensively in manufacture of wood alcohol and charcoal. Post oak accounts for ten per cent. Pine grows in southeastern and southwestern corners, and is scattered along the entire eastern border. Balance of timber is sycamore, walnut, maple and elm.

**MINERALS:**—Iron, copper, lead and limestone. Iron mines are confined to northeastern corner. Produce blue specular and red oxides, all of Bessemer class.

Simmons Hill mine has produced 300,000 tons; Millsap mine, 75,000; Pomroy mine, 50,000; besides the others aggregating fully as much in output. Copper

*Photo in heading: Rural Free Delivery.*



and lead indications are good in northeast corner but neither has been earnestly prospected.

**LAND:**—**Lay:** mountainous. Upland soils are sandy and often thin with clay subsoils. Estimated that eight per cent of land is valley and bottom; also that fifty per cent of upland is tillable in general farming. Remainder hill land would grow fruits and grasses. Next to creek and river bottoms, lands are most fertile in northeastern part of county. Prices are as follows: best improved lands, \$15 to \$25 an acre; upland, improved, \$5 to \$15; unimproved lands, \$1.25 to \$4 an acre. Government lands subject to homestead, at \$1.25 an acre, 4,209. Apples, peaches, pears, grapes, quinces, and berries are grown in profit, though the industry is just gaining headway. Largest orchard is at Salem and embraces 260 acres. There are several ranging in size from fifty to eighty acres each. Subsoils insure necessary drainage.

**MANUFACTURED PRODUCTS:**—Pig iron, charcoal, wood alcohol, wagons, barrels, brooms, and lumber. There are seven flouring mills.

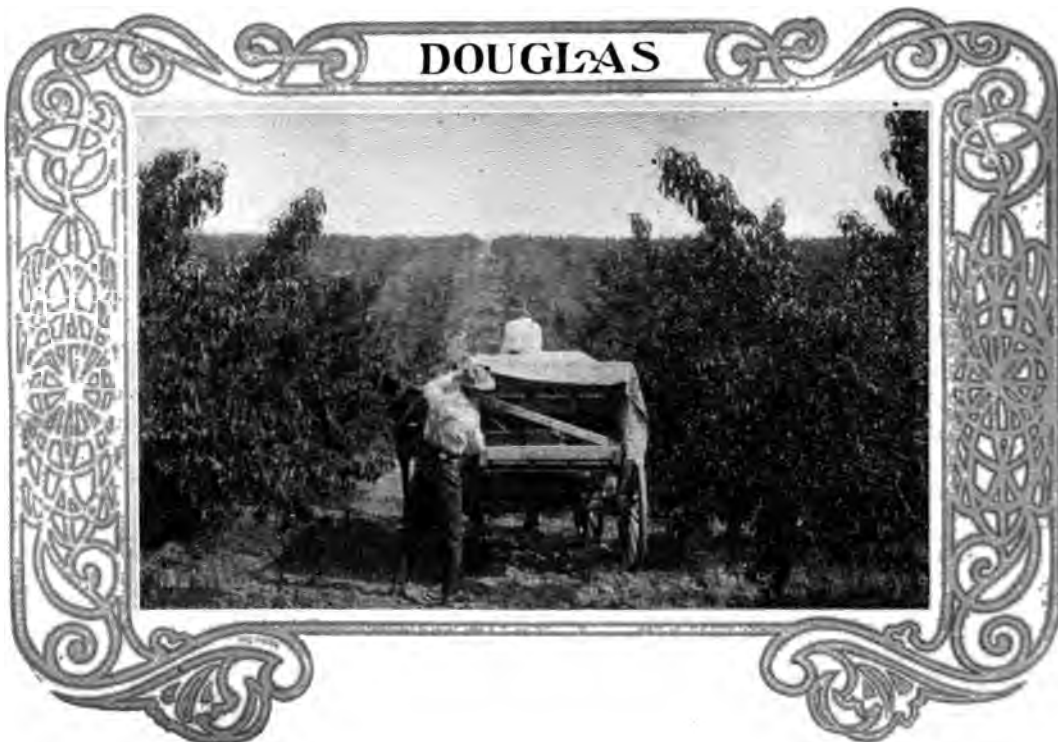
**TRANSPORTATION:**—Salem branch of St. Louis & San Francisco railroad, Cuba to Salem. Also two short branches to Sligo and Winkler, in Phelps county.

**FISHING AND HUNTING:**—Former is unsurpassed in Pigeon creek and Current and Meramec rivers, which also abound in scenery. Montauk Spring, at head of Current river, is a popular camping place for hunters and fishers. An occasional deer is killed. Wild turkeys are plentiful, likewise quail, squirrels, and rabbits.

**TOWNS:**—Salem, county seat, commercial, mining, and manufacturing town, population, 1,481; has flouring mill, stave and barrel factory, planing mills. Sligo is center of iron district; location of furnaces and wood alcohol and charcoal plants.

**NEWSPAPERS:**—Salem Monitor, Democrat, Democrat-Bulletin, Republican-Headlight, Leader.





DOUGLAS COUNTY'S 1902 CROP			
	ACRES	PRODUCT	VALUE
Corn	42,422	1,272,880 *	\$400,890
Wheat	21,109	332,300 *	127,710
Oats	3,681	92,025 *	24,385
Hay	12,701	12,700 †	101,600
Forage	550	735 †	3,675
Broom Corn	4	2,300 †	60
Clover Seed		40 *	225
Grass Seed		5 *	10
Cotton	10	2,800 †	195
Potatoes	400	40,000 †	14,000
Vegetables	560		21,175
Total			\$693,925
LIVE STOCK AND PRODUCTS			
KIND	NUMBER	VALUE	
Cattle	12,669	\$ 316,725	
Horses	5,758	345,360	
Mules	1,256	81,640	
Asses and Jennets	36	3,510	
Sheep	11,160	33,480	
Swine	26,031	260,310	
Chickens	75,852		
Turkeys	1,873	49,025	
Geese	3,091		
Ducks	2,465		
Swarms of Bees	642	1,005	
Honey	18,067 †	2,380	
Wool	30,250 †	5,040	
Milk	1,448,895 †	83,625	
Butter	258,212 †		
Eggs	481,150 †	60,145	
Total		\$1,242,325	
* Bushels.	† Pounds.	Dozen.	
† Tons.	\$ Gallons.		

**D**OUGLAS is in the second tier of counties north of the Arkansas line and is fifth east of Indian Territory. County embraces 792 square miles, equivalent to 506,880 acres. Of this total, 126,885 acres are under cultivation. The remaining vast acreage is under timber; hardwood timber of first growth. The forest is comparatively untouched. Half the footage in trees is white oak and black oak, trees often two to three feet through, and the land may be bought for about \$1.50 an acre. A comparatively small area mineral bearing and nearest the railroad may be had at \$3 to \$5 an acre. The land is mountainous. What is perhaps the highest and most rugged ridge of the Ozark mountains marks the north edge of Douglas county. Many streams have their rise here. The farming districts adjoin Fox, Beaver, Bryant's and Spring creeks, and White river. There are 2,738 farms of an average size of 127.1 acres, of an actual value, according to present prices, \$4,450,826.

**POPULATION:**—White, 16,775; colored, 27; American born, 16,634; foreign born, 168; total, 16,802. Farm homes owned, 2,205; rented, 579; other homes owned, 218; rented, 173; total families, 3,175.

**FINANCE:**—County tax, 50 cents on one hundred dollars valuation; school tax from 10 cents to \$1.50; average, 65 cents; total assessed valuation, \$2,042,548;

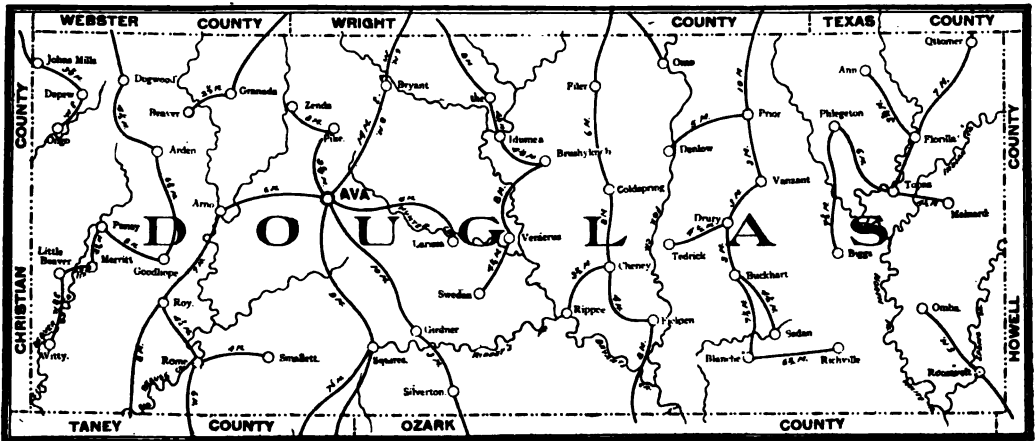
farms assessed on 40 per cent of value basis; town lots, 50 per cent and personal property, 40 per cent.

**TIMBER:**—On an average year timber product shipments approximate as follows: Railroad ties, 3,000; fence and mine posts, 4,800; hardwood lumber, 1,200,000 feet; piling, 680 pieces. Along the south border of Douglas county is a pine growth, in extent about one per cent of the timber. This is being removed at the

*Photo in heading: Land of the Sun-kissed Peach.*

rate of about two and one-half million feet annually. White oak abounds in central part of county and there is also a large body in the west end and on north hill sides throughout the county; estimated to embrace 20 per cent of timber. Twenty-four per cent is black oak, largest growth found near Ava and Squires. Black-jack grows everywhere to extent of ten per cent. Post oak, five per cent; hickory, two per cent; walnut, one per cent.

**MINERALS:**—Twenty-five per cent of the county bears mineral indication. Lead, zinc, copper, and iron are found. Lack of railroad transportation leaves the prospects for mineral undeveloped. Limestone and sandstone are found along all streams.



**LAND:**—Soil is gravelly and often stone-bearing, but possesses considerable fertility. By proper rotation, profitable cereal growing is followed. Clover and grasses grow luxuriantly, even where too rough or stony for wheat or corn. Stock raising most nearly accords with the county's natural adaptability. Of the land in cultivation, bottoms sell for \$15 an acre; best ridge or upland valleys, \$10; less level ridge land, \$5. Wild timbered lands range from \$1.25 an acre to \$5. Estimated that \$1.50 an acre would buy nearly all wild acreage. There are 6,745 acres owned by the United States government, which holds them subject to homestead at \$1.25 an acre.

**FRUIT LANDS:**—Soil, subsoil, climate and one-half of the topography are favorable to fruit growing. Douglas borders the west side of Howell county, which grows more peaches than any other Missouri county.

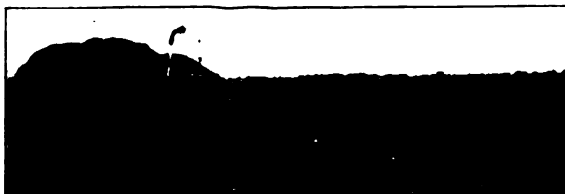
**MANUFACTORIES:**—Are of local size and importance. Flouring mills, saw mills, tannery, planing mills, shingle factories, and wool carding machines.

**PUBLIC ROADS:**—Wagon roads are a feature mention-worthy. Natural gravel forestalls the mud.

**CAVES AND SCENIC POINTS:**—Brown's Cave, near Rippey, fifteen miles east of Ava, possesses interest for geologists and sightseers. Between Ava and Veracruz, are the highest mountains in the county.

**TOWNS:**—Ava, county seat, has good flouring mill, feed mill and tannery. Freight comes by wagon via Mansfield, in Wright county, nearest railroad point, fifteen miles away. Rome, Topaz, Squires, Denlow, Bryant, Pansy, Winfield, Larissa, Veracruz and Loftin are farming centers, having custom flouring and feed mills.

**NEWSPAPERS:**—Ava: Douglas County Republican; Ava: Douglas County Herald.





**D**UNKLIN grows more cotton to the acre than any other Missouri county; and Missouri's average acre yield is the largest among the States. The county is located in the southeast Missouri delta district, extending below Arkansas' general north boundary line and is included between the St. Francis and the Mississippi rivers.

There are 500 square miles, 320,000 acres, 101,173 acres improved. Farms number 2,542, averaging 565 acres, estimated value, \$4,338,670. Excepting two thousand acres of prairie in bodies of not more than four hundred acres each, Dunklin's surface was originally a dense forest of large-growth gum, all varieties of oak, maple, sycamore, poplar, cypress, ash, pecan, walnut, and sassafras. Pecan groves are yet standing, trees measuring up to three feet through. Along the sloughs is corkwood; ginseng and muscadine grape grow wild in the woods. Timbering interests are of commercial size. Mills, ranging in capacities from 15,000 to 30,000 feet daily, are at Dillman, Kennett, Decatur, Paulding, Kelleys and Campbell.

The population is: White, 21,500; colored, 206; foreign born, 83; American born, 21,623; total, 21,706. Farm homes owned, 3,107; rented, 1,645; town homes owned, 791; rented, 969; total, 6,512.

**LAND:**—Level, excepting one strip one to two miles wide by ten miles long extending across the northwest corner, of a general elevation of 230 feet above the Gulf. Fifty thousand acres are owned by non-residents. Of the 101,173 acres improved farms, one-half are held at \$30 to \$40 per acre; a very few within two miles of Kennett, Malden, Campbell, Senath, or Cardwell, all live markets, bring \$45 to \$55 per acre. The remainder is to be had at \$20 to \$30 per acre. Unimproved land, representing about 300,000 acres, sells at \$7.50 to \$10 in the lower side of the county, while the same character of land in the north side brings \$12.50 to \$17.50. Drainage districts, at \$2.50 an acre, have recently been organized covering the entire county. Soil is alluvial, composed largely of clay and oftentimes of sand. It is naturally adapted to cotton, melons, corn, onions, potatoes and other vegetables.

**MANUFACTURES:**—Timber and cotton products. In cottonseed oil production the county excels. In the first named, one thousand men find employment at prosperous wages. At Cardwell is located the largest egg case factory in the world. Barrel staves and boxes are also important items of manufacture.

**RAILROADS:**—All the towns are located on railroads which have county mileages as follows: Paragould & Southwestern, 13.07; St. Louis & Southwestern, 13.63; Delta Branch, 5.10; Frisco, 42.31; Frisco Branch, 4.50.

DUNKLIN COUNTY'S 1902 CROP			
	ACRES	PRODUCT	VALUE
Corn	46,847	1,639,645 *	\$ 614,865
Wheat	4,074	95,740 *	56,485
Oats	802	24,060 *	8,020
Hay	3,575	5,365 †	58,850
Forage	1,425	1,660 †	8,300
Broom Corn	8	1,500	40
Cotton	38,495	13,858,200 †	1,039,365
Tobacco	12	8,520 †	850
Potatoes	801	52,175 *	25,285
Vegetables	501		40,175
<b>Total</b>			<b>\$1,847,035</b>
LIVE STOCK AND PRODUCTS			
KIND	NUMBER	VALUE	
Cattle	13,206	\$ 297,185	
Horses	4,410	264,600	
Mules	2,765	193,550	
Asses and Jennets	20	1,800	
Sheep	615	1,845	
Swine	39,180	391,900	
Chickens	78,186	49,400	
Turkeys	890		
Geese	5,808	3,541	
Ducks	6,046		
Swarms of Bees	1,877	7,821	
Honey	62,587 †	329	
Wool	1,975 †	99,935	
Milk	1,557,150 †		
Butter	300,829 †	59,365	
Eggs	474,910		
<b>Total</b>		<b>\$1,370,431</b>	
* Bushels.	† Pounds.	Dozen.	
+ Tons.	§ Gallons.		

Photo in heading: Cotton Field Near Kennett.

**CHURCHES AND SCHOOLS:**—In Kennett, Malden and Campbell there are a total of fourteen churches, representing the leading Protestant denominations. Each of the towns has a graded school system.

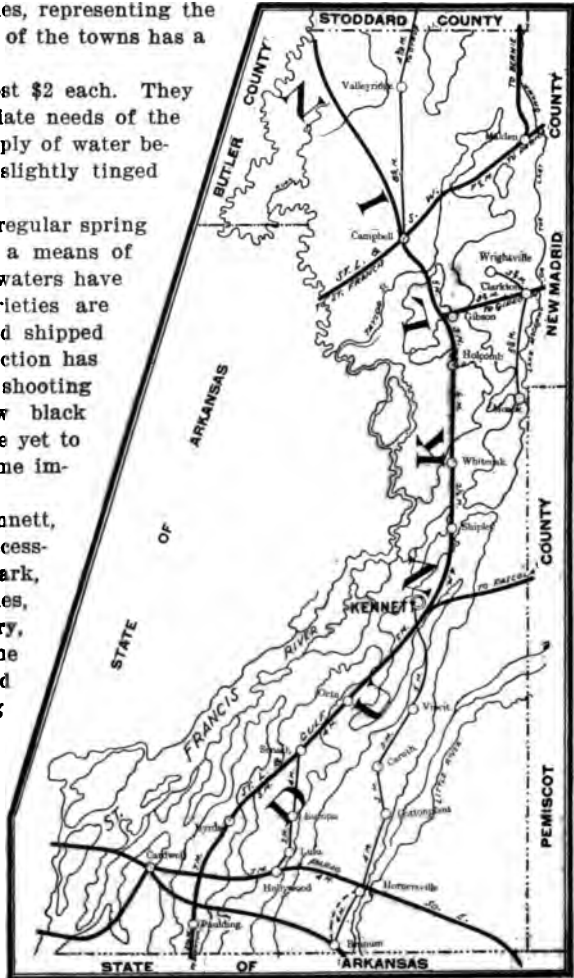
**WATER:**—Wells in Dunklin county cost \$2 each. They can also be removed to suit the immediate needs of the owner. Most of them are driven, the supply of water being, therefore, inexhaustible. Water is slightly tinged with iron.

**FISH AND GAME:**—Subsequent to the regular spring rise of the St. Francis river, fishing is a means of ready money to the farmers. When the waters have subsided, car loads of all Mississippi varieties are stranded. These are caught by hand and shipped to St. Louis. As a game reserve, this section has long been the hunters' paradise. Duck shooting is equal to the ideal on canvas. A few black bears, deer, coons, 'possums and mink are yet to be found. The fur industry is yet of some importance.

**TOWNS:**—Not one has a saloon. Kennett, county seat, has held an annual fair successfully for twelve years; it has a baseball park, electric lights, and in commercial industries, a slack barrel factory, buggy spoke factory, broom factory, cottonseed oil mills, machine shop, ice plant, bottling works and cold storage, three cotton gins and two planing mills. Malden has electric lights and waterworks, machine works, heading factory, ice plant, bottling works, shingle and saw mill, cottonseed oil mill, six cotton gins, and is the location of the freight transfer sheds of the Cotton Belt railroad. Campbell is an important railroad junction. The town's enterprises are a saw mill and dry kiln of 30,000 feet capacity; planing mill, hoop mill; handle factory, shingle mill, stave mill, axe handle factory, a cotton gin, roller mills and brick yard. Senath has four cotton gins and a saw mill; Cardwell is the location of egg case and box manufacturing; Holcomb has two cotton gins; Hornersville two gins, saw mill and grist mill; Caruth, White Oak, and Clarkton are saw mill towns.

**NEWSPAPERS:**—Kennett: Dunklin Democrat, Dunklin County Mail; Malden: Dunklin County News; Campbell Citizen; Senath Star.

**FINANCE:**—County tax, 70 cents; school tax, 75 cents; assessed valuation, \$4,298,674; 30 per cent actual valuation; no debts.



SOME PUMPKINS, DUNKLIN COUNTY.





## FRANKLIN

**F**RANKLIN is the nativity of the Missouri meerschaum cob pipe, home of the New Haven nurseries, location of white sand deposits and center of German zither manufacture. It is also a leading wheat producing county. It is located upon the south bank of the Missouri river, thirty miles west of the city of St.

Louis. It embraces 866 square miles, 544,240 acres of land, 263,711 acres of which are improved farms. These number 3,853, and average 121.8 acres, including land of cultivable, pasture and timber character. Actual value of farm lands, \$9,919,500.

**POPULATION:**—White, 28,756; colored, 1,825; native born, 27,730; foreign born, 2,851; total, 30,581. Native born of foreign parentage, one-third. In some communities German is spoken. Farm homes owned, 2,875; rented, 961; other homes owned, 1,095; rented, 1,139; total families, 6,069.

**FINANCE:**—County tax: general revenue, 30 cents; road, 10 cents; special road and bridge, 10 cents; school, tax, five cents to \$1.15; average, 49 cents; assessed valuation one-half real value; no county nor township debt.

**COMMERCIAL TIMBER:**—Oak, hickory, walnut, cedar.

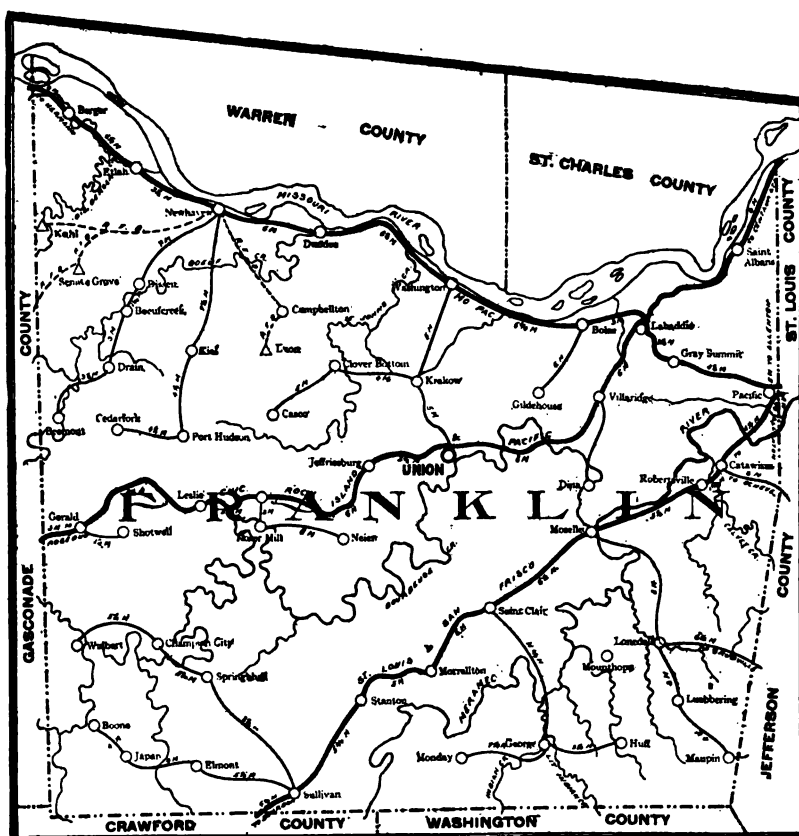
**WHITE SAND:**—Of ninety-nine per cent silica exists in form of solid bed of sand rock along Meramec river bluffs at Grays Summit and in a mountain at Pacific. Disintegrates readily. Three thousand cars annually are prepared and shipped from Pacific. It is used in manufacture of glass, for moulding purposes in iron and steel, fire brick and sewer pipe manufacture, sawing stone, and in making mineral paint.

**LAND:**—Excepting two pieces of prairie, one four miles southeast of Union, embracing 4,500 acres, the other eight miles south of New Haven, containing three square miles, and the river bottom land, Franklin is of frequent hills, rising one hundred and fifty feet in

FRANKLIN COUNTY'S 1902 CROP			
	ACRES	PRODUCT	VALUE
Corn	59,401	2,376,040 *	\$ 887,265
Wheat	86,724	1,734,480 *	1,023,345
Oats	10,645	319,380 *	106,460
Hay	22,693	36,810 †	363,100
Forage	1,195	1,395 †	6,975
Broom Corn	36	18,000 †	495
Clover Seed		2,850 *	15,675
Grass Seed		25 *	55
Tobacco	60	42,600 †	4,260
Potatoes	1,716	171,600 *	82,370
Vegetables	1,080		71,095
Total			\$2,561,095
LIVE STOCK AND PRODUCTS			
KIND	NUMBER	VALUE	
Cattle	25,355	\$ 697,262	
Horses	9,060	543,600	
Mules	3,340	283,800	
Asses and Jennets	70	6,300	
Sheep	7,670	229,010	
Swine	48,715	487,150	
Chickens	27,316 †		
Turkeys	2,339		
Geese	4,549	144,350	
Ducks	2,312 †		
Swarms of Bees	820	2,132	
Honey	27,323 †	3,417	
Wool	31,075 †	5,179	
Milk	2,834,431 §		
Butter	517,245 †	208,280	
Eggs	1,682,860 †	210,360	
Total		\$2,564,840	
* Bushels.	† Pounds.	‡ Dozen.	
† Tons.	§ Gallons.		



Photos in heading: Panorama of Franklin County; Along the Meramec River Bluff.



extreme above complement valleys of generous extent. Hills rise gradually, of long slant, rather than precipitous inclination. Immediately bordering Missouri, Meramec and Bourbeuse rivers are steep bluffs. Missouri bottom land extends along the river with varying liberal width, from Labaddie to Boles, and from Etiah to the northwest corner. Along Meramec and Bourbeuse rivers are also valleys alluvial. Hill lands are clay. No government land; estimated 35,000 acres waste land. Entire county adapted to fruit growing, river hills pre-eminently so. Missouri river bottom well improved within a few miles of town sells at \$70 an acre, and down to \$30, in rare instances. It seldom overflows—on an average of once in ten years. Excepting the northeast thirty square miles, the land north of an east and west line through Union, is above described. South thereof, some bottom land, prospective mining lots or town-bordering property, brings \$30 an acre. The average is \$20. In the southeast land is found as low as \$10; and in the southwest as low as \$5 an acre. South-county land is covered with first growth commercial size hardwood timber.

**MANUFACTURES:**—Cob pipes are made to extent of one and one-third millions of pounds annually from cobs of corn grown especially therefor. Washington is the location of these factories, a brewery, and the Franz Schwarzer Zither factory, only one of its kind in America.

**NEW HAVEN NURSERIES:**—Among the largest of the world. Located in loess lands bordering Missouri river.

**TRANSPORTATION:**—From St. Louis, it is less than one hour's ride via Missouri Pacific, the Frisco or Rock Island railroads. Turnpike mileage, 35.

**CHURCHES:**—Presbyterian, Cumberland Presbyterian, Baptist, Methodist, German Lutheran, German Evangelist, Christian and Catholic denominations.

**NEWSPAPERS:**—Union Tribune; Pacific Transcript; New Haven Leader; Washington Observer; Sullivan Sentinel, and Washington Post (German).



**G**ASCONADE is situated upon the south side of the Missouri river, seventy miles west of St. Louis. It is horticultural and agricultural. It produces more wine than any other Missouri county. People are largely German. Along the Missouri river loess lands favor fruit raising; every farmer grows grapes sufficient for home wine, and Hermann, county seat, is location of Stone Hill wine cellars, largest east of California. But one-third of the county is in cultivation—109,491 acres of the 326,400; in square miles, 510. There are 1,799 farms of 164 acres average size, including cultivable, pasture, and timber lands, worth in total, \$3,877,796. Wheat, cattle, corn are leading products.

**POPULATION:**—White, 12,230; colored, 68; American born, 10,585; foreign born, 1,713; total, 12,298. Farm homes owned, 1,518; rented, 260; other homes owned, 375; rented, 281; total families, 2,434.

**FINANCE:**—County tax, 35 cents; road tax, 25 cents; school tax, 38 cents on one hundred dollars; assessed valuation, \$4,084,651; fifty per cent of real valuation; no county debt; no township debt.

**TIMBER:**—Originally the county was wholly timbered. Species are white oak, black oak, hickory mainly; along streams were walnut, cottonwood, elm, sycamore. One-third has been cleared. Small saw mills operate at Hermann, Morrison, Fredericksburg, Bay, Drake, Bland, Owensville.

**KAOLIN:**—Pits operated for three years along the route of Rock Island railroad. Supply is first quality and endless quantity. Saltpetre caves exist along Gasconade river; iron and limestone are found, latter in vast quantities.

**CHARACTER AND PRICE OF LANDS:**—Adjoining the Missouri river are great bluffs measuring in instances five hundred feet high. Back of these for fifteen miles are hills averaging three hundred feet above sharp valleys. The land to explored depth is perous clay, technically silt land, lending drought resistance to trees. Timber is largest here and forests more dense. Along the Bourbeuse river in the south are likewise high bluffs. Between the two sets of bluffs the land is less abrupt though hilly with deep-set streams. In this section a representative farm is 160 acres, with fifty acres in cultivation, five room house, stone or brick, land worth \$20 an acre. Bordering the Missouri river are two thousand acres of bottom land selling at \$65 to \$75; Gasconade and Bourbeuse river bottoms amount to twenty thousand acres, worth \$45 to \$55. Hill land,

GASCONADE COUNTY'S 1902 CROP			
	ACRES	PRODUCT	VALUE
Corn	24,765	891,450 *	\$ 394,295
Wheat	41,201	782,620 *	461,865
Oats	4,573	123,045 *	42,680
Hay	11,991	17,965 †	152,875
Forage	465	540 †	2,700
Broom Corn	3	1,600 †	40
Clover Seed		1,300 *	7,150
Grass Seed		10 *	20
Tobacco	9	6,390 †	640
Potatoes	765	94,375 *	45,300
Vegetables	415		26,410
Total			\$ 1,073,975
LIVE STOCK AND PRODUCTS			
KIND	NUMBER		VALUE
Cattle	14,990		\$ 407,550
Horses	3,825		229,500
Mules	2,730		191,100
Asses and Jennets	30		2,700
Sheep	7,155		21,465
Swine	20,687		205,870
Chickens	127,043		
Turkeys	2,400		
Geese	4,367		57,210
Ducks	1,194		
Swarms of Bees	445		955
Honey	14,833 †		1,854
Wool	24,900 †		4,150
Milk	1,187,024 †		
Butter	180,242 †		118,245
Eggs	733,000 †		91,625
Total			\$1,482,224
* Bushels.	† Pounds.	‡ Dozen.	
† Tons.	§ Gallons.		

*Photos in heading: Stone Hill Wine Cellars and Vineyard; Missouri Pacific Into Hermann; Gasconade County Courthouse.*

improved or connected with improved farms, 100,000 acres worth \$17.50 to \$25. The balance is unimproved, wild timbered hills, worth \$3 to \$10 an acre. A few tracts measure 1,000 acres, though generally below 400 and practically all owned by residents.

**MANUFACTURED PRODUCTS:**—Wine, shoes, flour, brick and beer are manufactured. Eight wine cellars of Stone Hill Company at Hermann contain 750,000 gallons made from grapes. Here was made the wine wherewith the battleship Missouri was christened.

**TRANSPORTATION:**—Main line Missouri Pacific, Kansas City to St. Louis, 16.28; Rock Island, main line between same points, 17.35. The first has four passenger trains each way daily. Three steam boat companies operate boats from Rocheport to St. Louis stopping at Hermann. Sixty-five miles of gravel roads across county; built thirty years, repaired annually.

**CHURCHES:**—Catholic, Evangelical, German Methodist, Presbyterian and Baptists are represented.

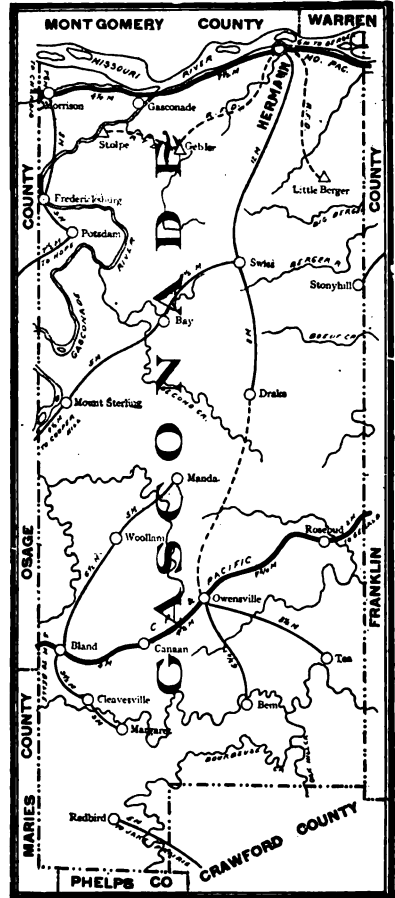
**HIGH SCHOOLS:**—Hermann and Owensville support same.

Streams supply stock water; for family use cisterns are largely in ascendency. Water is limestone or sandstone seepage. Three miles from Bland is a sulphur spring.

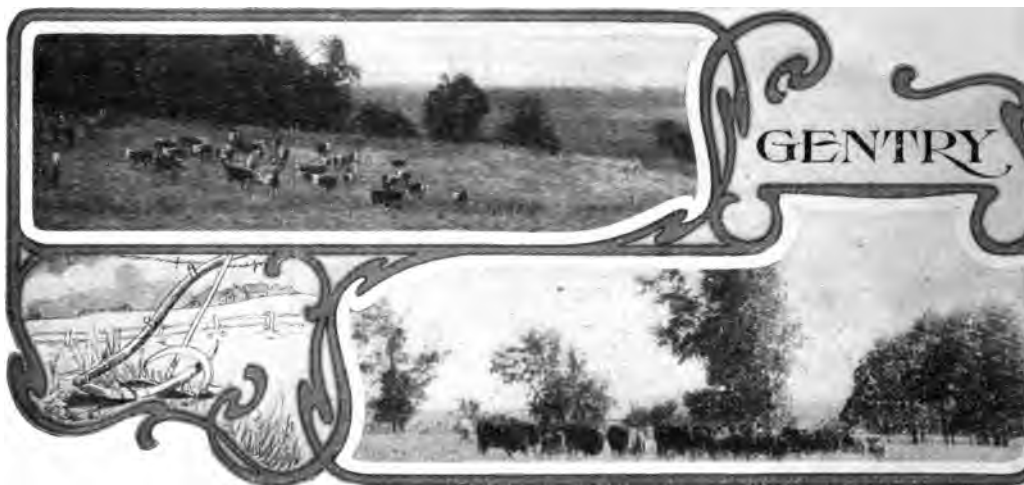
**FISH AND GAME:**—All the Missouri river varieties and game fish are caught in the Gasconade and Bourbeuse, along which many picnic parties find sport in summer. There are some deer, more wild turkey, plentiful quail, squirrels and rabbits.

**TOWNS:**—Hermann, location of \$50,000 county courthouse donated by Charles D. Eitzen, a citizen deceased. Incorporated under special State charter providing for board of five trustees instead of mayor. These and collector are elected; former appoint treasurer and clerk. Established 1845; houses are mostly brick and stone, built German fashion, with eaves to drip on sidewalk; Owensville; Leduc; Morrison; all farming towns.

**NEWSPAPERS:**—Hermann Volksblatt, Advertiser Courier; Owensville Banner, Argus.



IN THE VALLEY OF THE GASCONADE.



**G**ENTRY is known for blue grass and live stock. That it is one of the foremost blue grass counties of Missouri; that it stands even first in blue grass product, largely indicates the reason for the further fact that at the Columbian Exposition thirty prizes went to Gentry county live stock. Premiums were won with cattle, jacks, sheep and hogs. Monarch 190, a jack owned by Captain Charles G. Comstock, took first prize at the Chicago Exposition as best jack under three years in America. County products, in point of importance, are cattle, corn, horses, mules and jacks, hogs and blue grass hay. There are 450 square miles of land, 288,000 acres, of which 227,449 acres are improved farms. Two thousand six hundred and ninety-nine farms, averaging 111.4 acres each, aggregate an actual worth of \$9,384,435.

GENTRY COUNTY'S 1902 CROP			
	ACRES	PRODUCT	VALUE
Corn	98,793	4,149,306 *	\$1,306,030
Wheat	1,515	30,300 *	17,425
Oats	5,940	196,020 *	50,963
Hay	45,210	76,855 †	384,275
Forage	7,735	10,315 †	51,575
Broom Corn	60	32,000 †	910
Clover Seed		80	440
Grass Seed		6,670 *	10,340
Tobacco	8	7,200 †	720
Potatoes	819	98,280 *	23,590
Vegetables	890		45,860
<b>Total</b>			<b>\$1,891,630</b>
LIVE STOCK AND PRODUCTS			
KIND	NUMBER	VALUE	
Cattle	45,460	\$1,477,450	
Horses	13,173	878,200	
Mules	1,375	103,125	
Asses and Jennets	98	9,800	
Sheep	18,710	62,365	
Swine	69,027	690,270	
Chickens	173,199		
Turkeys	6,420	156,940	
Geese	4,328		
Ducks	3,028		
Swarms of Bees	3,435	10,575	
Honey	114,500 †	14,315	
Wool	86,200 †	14,365	
Milk	3,097,068 †	201,495	
Butter	509,430 †		
Eggs	1,004,460	125,560	
<b>Total</b>		<b>\$3,744,460</b>	
* Bushels.	† Pounds.	Dozen.	
† Tons.	§ Gallons.		

**TOPOGRAPHY:**—Grand river flows through the county north to south. It has three main contributing forks and many minor tributaries. Inevitably upon the streams is a wide bottom. The soil is a black sandy loam, overflows with infrequency according to varying altitudes which largely determine as to whether the price is \$40 or \$50 an acre. Gumbo is rare. Along Grand river and the streams especially in the northeast and northwest townships there is bluff land which can be bought at \$30, usually, however, in connection with bottom lands. One-third of the county is prairie, in small strips intervening the timbered streams and of a greater acreage in the southwest one-half. Soil is two to three and one-half feet in depth of a black prairie vegetable mould and land sells at \$40 to \$50. Near Stanberry and King City, owing to location it occasionally reaches \$80. Long rolling hill land defines the largest amount of any single kind. In depth of soil it varies slightly more than the prairie, but in price it ranges the same. Best farm improvements are mainly in the southwest part of the county. The average house is worth \$800, with other improvement in proportion.

At Albany a canning factory puts up corn and tomatoes; a flouring mill does a local business; monument works and a wagon shop. At Stanberry, a well-boring machine factory and a flouring mill contribute the bulk of the manufacturing.

Photos in heading: Cattle, O. G. Comstock and Son, Albany; Cattle, G. W. Hadley.

**RAILROADS:**—Stanberry is the location of railroad repair shops and freight division end, adding considerable importance. Taxable roadbed within the county: Wabash, Omaha to St. Louis, 24.76; St. Joseph & Des Moines, 18.13; Leon, Mount Ayr & South-western, 7.60; Grant City & Southern, 12.28.

**SCHOOLS:**—Besides well improved rural school systems, there are two city systems headed with high schools approved by University of Missouri, and a normal school. Approved high schools are located at Albany and Stanberry. Stanberry Normal School, private institution founded 1881, enrolls 250 students. Faculty members, 16; grounds, buildings and equipments value \$100,000; academic, commercial, musical, and short-hand departments. It maintains dormitory for young women.

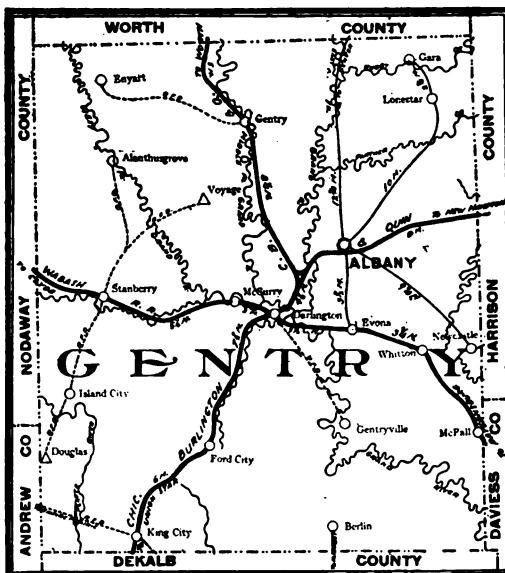
**WATER:**—Hard and soft water wells. Live stock supply is supplied through streams and wells, the latter 20 to 40 feet. At Gara is a mineral water spring upon which has been established a hotel costing \$30,000.

**TOWNS:**—Stanberry, largest town, supported by schools, railroad interests and farming. Has electric lights, waterworks, telephone. Albany, county seat, electric lights, waterworks, telephone. King City, Darlington, McFall and Gentry are farming centers.

**POPULATION:**—White, 20,538; colored, 16; American born, 20,191; foreign born, 363; total, 20,554. Farm homes owned, 1,809; rented, 867; town homes owned, 1,073; rented, 743; total families, 4,492.

**FINANCE:**—County tax, including road and bridge, 55 cents; school tax from 10 cents to \$1.25; average, 43 cents; total assessed valuation, \$7,661,810; assessed valuation per cent of real valuation, 40 per cent; no county debt; no township debt.

**NEWSPAPERS:**—Albany Capital, Ledger, King City Chronicle, Democrat; Darlington Record; Gentry Sentinel; McFall Mirror; Stanberry Headlight, Herald, Democrat, Owl, Advocate.



LOADING HAY BY MACHINERY.



**F**RUIT, agriculture, live stock, wholesale interests, manufacturing, railroads, and schools are found in the category of Greene's chief interests. The county has what some of its neighbors await—development. It is situated in southwest Missouri, two hundred and thirty miles southwest of St. Louis, upon a plateau of the Ozark mountains. Thus climate and land lay are conducive to successful horticulture, agriculture, and live stock engagement. Next

came the railroads which made Springfield, county seat, a transportation center, lent impetus to industries in immediate connection with the land, and were forerunners to wholesaling, manufacturing, and to the establishment at Springfield of one of the best colleges in the west—Drury College. Ozark border soil is red limestone clay, moderately flinty, and adapted eminently to wheat. This called for the establishment of flouring mills, for which the county is known. At Republic is located a mill with a daily

#### GREENE COUNTY'S 1902 CROP

	ACRES	PRODUCT	VALUE
Corn	80,526	3,221,040 *	\$1,014,625
Wheat	70,900	1,384,305 *	761,370
Oats	16,306	619,330 *	164,200
Hay	25,360	43,110 †	323,325
Forage	1,045	1,395 †	6,975
Broom Corn	20	11,000 †	305
Clover Seed		1,400 *	7,840
Grass Seed		480 *	770
Tobacco	38	24,700 †	2,470
Potatoes	1,186	142,320 *	49,810
Vegetables	3,270		100,140
Total			\$2,431,830

#### LIVE STOCK AND PRODUCTS

KIND	NUMBER	VALUE
Cattle	25,581	\$ 831,385
Horses	11,515	767,665
Mules	2,570	179,900
Asses and Jennets	63	6,300
Sheep	5,294	15,880
Swine	33,715	337,150
Chickens	172,569	
Turkeys	6,824	183,250
Geese	3,126	
Ducks	8,440	
Swarms of Bees	2,185	6,200
Honey	72,133 †	9,105
Wool	22,800 †	3,800
Milk	4,349,910 †	330,090
Butter	844,407 †	
Eggs	1,100,110 †	137,515
Total		\$2,808,240

\* Bushels. † Pounds. † Dozen.  
† Tons. † Gallons.

Photos in heading: Frisco Freight Yards; Retail District, Springfield; East Walnut Street, Springfield; Greene County Orchard; Model Mills, Springfield; Y. M. C. A. Building, Springfield; Lime Works, Ash Grove.

flouring capacity of 2,000 barrels. It has a storage capacity of 500,000 bushels and its exports reach Europe and South America. The flour and feed exportation of Greene county amounts to 5,000 cars annually. Postoffice department operates ten rural free delivery routes in Greene county.

**POPULATION:**—White, 49,415; colored, 3,298; American born, 51,045; foreign born, 1,668; total, 52,713. Farm homes owned, 6,020; rented, 1,318; other homes owned, 3,003; rented, 3,937; total families, 14,278.

**FINANCE:**—County tax, 40 cents on the one hundred dollars; school tax, average, 52 cents; total, assessed valuation, \$14,917,275; assessed valuation is two-thirds actual valuation. County debt, \$200,000.

**LAND:**—County contains 688 square miles of land, equal to 440,320 acres, of which 278,721 acres are included in improved farms. There are 4,320 farms of an average size of 85.4 acres, valued, according to present selling prices, at \$8,277,325. Total products in agriculture, horticulture, and value of live stock amount to three-fourths of the worth of the land where grown. Excepting along the streams the land is practically a broad stretch of undulating surface. Best improved farms sell at \$25 to \$40, situated upon the table lands. Ridge farms of equal fertility are always slightly less salable, and bring from \$3 to \$5 less on the acre. Some improved lands may be had at \$15 to \$25 an acre. In the creek bottoms land may be had at \$25 to \$35 an acre. Adjoining Springfield farm land reaches \$75 to \$90 an acre.

**FRUIT:**—Strawberries, apples, peaches, and grapes are grown in greatest quantities. At Springfield is the headquarters of the Ozark Fruit Growers' Association, organized to further the interests of fruit growing in southern Missouri.

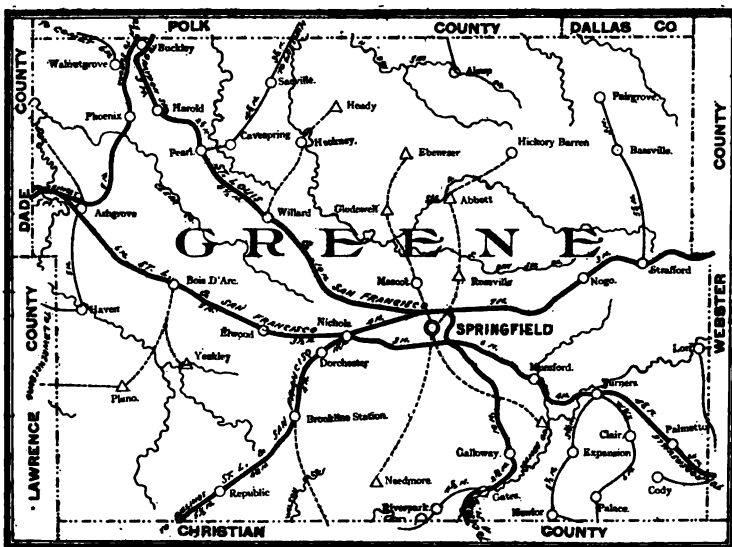
**MANUFACTURING:**—Lime, furniture, wagons and carriages, cooperage products, brewery products, brooms, harness and saddles, stoves, vinegar, fruit butters, ice, cedar leadpencils, and products of evaporators and canning factories are included. Manufacturing amounts to \$8,000,000 a year.

**COLLEGES:**—Drury College, Springfield, member of College Union, which is to say that it is one of the strongest institutions of education in Missouri. Loretto Academy and St. Joseph's school are Catholic institutions of strength, having local patronage. Springfield Normal School and Business College, and two other business schools. Springfield High School is articulated with the State University.

**TRANSPORTATION:**—Frisco, five divisions, and the Kansas City, Clinton & Springfield center at Springfield. Division offices and shops are also located here.

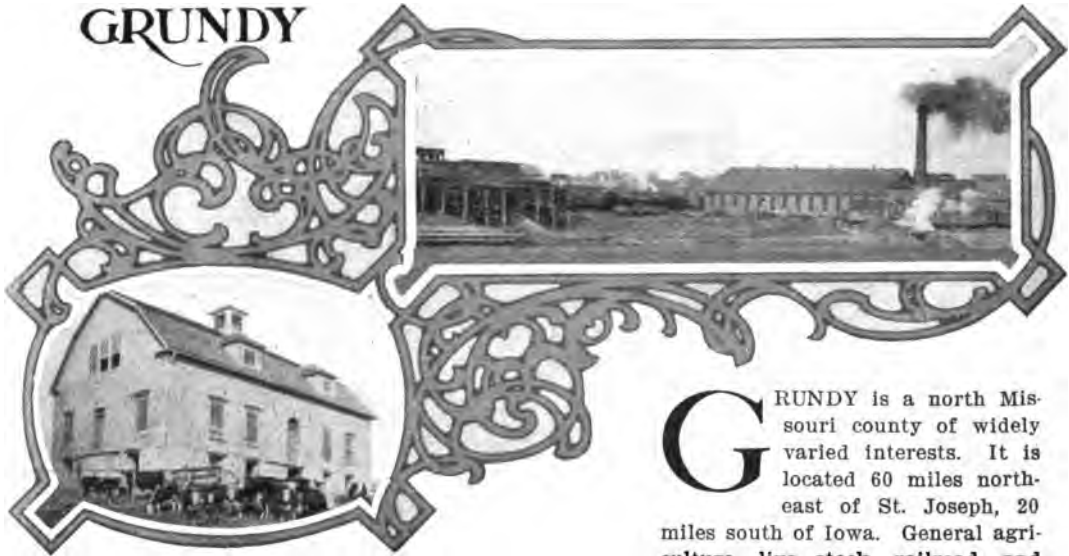
**TOWNS:**—Springfield, 22,267; Ash Grove, 1,039; Republic, 856, are the incorporated towns. All derive large business from horticulture, live stock and agricultural interests. Ash Grove has the additional feature of lime kilns, and Republic is location of flouring mills.

**NEWSPAPERS:**—Springfield: Daily and Weekly Leader-Democrat; Daily and Weekly Republican, Express, Sunday Tradesman, Practical Fruit Grower, Sunny South, The Triple Link, The Policy Holder, Opportunity, Baptist News. Ash Grove: Commonwealth, Advance. Republic Monitor. Walnut Grove Eagle.





# GRUNDY



**G**RUNDY is a north Missouri county of widely varied interests. It is located 60 miles north-east of St. Joseph, 20 miles south of Iowa. General agriculture, live stock, railroad, and

coal mining activities are most prominent. In cattle and corn product it annually crosses the two million dollar mark. At Trenton, county seat, an annual fair, established in 1867, is held in encouragement of agriculture, horticulture, and live stock. Another event—one attended by breeders from north Missouri and southern Iowa—is the semi-annual sale of registered cattle. An immense pavilion, erected for this purpose, is also used for periodical sales of pure bred horses and hogs. Coal mines at Trenton employ two hundred men, supply from which mines is consumed by individuals and by Rock Island railroad, which maintains car shops and a division end at Trenton. Poultry represents a large income to farmers who are also rapidly increasing facilities for private dairying.

**POPULATION:**—People from every State. In last two years influx of farmers from north and east has been large. White, 17,600; colored, 232; American born, 17,447; foreign born, 385; total, 17,832; farm homes owned, 1,552; rented, 661; other homes owned, 950; rented, 920; total families, 4,083.

**FINANCE:**—County tax, 28 cents; school tax, average, 49 cents; total assessed valuation, \$6,105,970; assessed valuation per cent of actual valuation, 40; county debt, \$60,000, recently issued for court house. No township debt.

**LAND:**—Square miles of land, 460, or 294,400 acres, of which 197,384 acres are under cultivation. Number of farms, 2,298; average size, 118.6 acres, including land of arable, pasture, and other character. Grundy county is drained to the southward by a fork of Grand river and several other small streams. Between these streams are found prairie ridges. Uplands are black, vegetable-mould soil, twelve to twenty inches in depth, underlaid with yellow, porous clay. Bottom lands are a heavier black soil which originally was covered with heavy, wild prairie grass. When cultivated it becomes lighter weight, and is underlaid at twenty-foot depth with sheet water. Farm improvements equal those of southern Iowa. Numerous farm homes cost \$1,500 to \$2,000 each; better in east half of county. Valley land sells at \$30 to \$50; prairie, \$40 to \$65; around Trenton, up to \$75. Cheapest land in county is in small creek-bordering patches, selling at \$35.

**FACTORY PRODUCTS:**—Axe handles, flour and corn meal; cigars are manufactured. A machine shop and a canning factory operate at Trenton.

## GRUNDY COUNTY'S 1902 CROP

	ACRES	PRODUCT	VALUE
Corn	70,425	3,390,400 *	\$1,064,325
Wheat	2,968	81,820 *	46,930
Oats	2,706	110,946 *	28,845
Hay	47,852	86,135 †	430,875
Forage	7,610	10,145 †	50,725
Broom Corn	85	46,750 †	1,285
Clover Seed		100 *	550
Grass Seed		5,900 *	9,145
Tobacco	25	22,500 †	2,250
Potatoes	925	115,625 *	27,500
Vegetables	815		86,245
<b>Total</b>			<b>\$1,698,975</b>

## LIVE STOCK AND PRODUCTS

KIND	NUMBER	VALUE
Cattle	34,136	\$1,109,420
Horses	10,292	688,135
Mules	1,379	108,425
Asses and Jennets	71	7,100
Sheep	12,009	49,030
Swine	87,876	376,760
Chickens	144,189	
Turkeys	4,945	
Geese	3,238	112,120
Ducks	1,651	
Swarms of Bees	2,596	7,235
Honey	86,600 †	10,325
Wool	66,590 †	9,430
Milk	2,540,632 †	147,915
Butter	470,363 †	
Eggs	839,390 †	103,675
<b>Total</b>		<b>\$2,714,070</b>

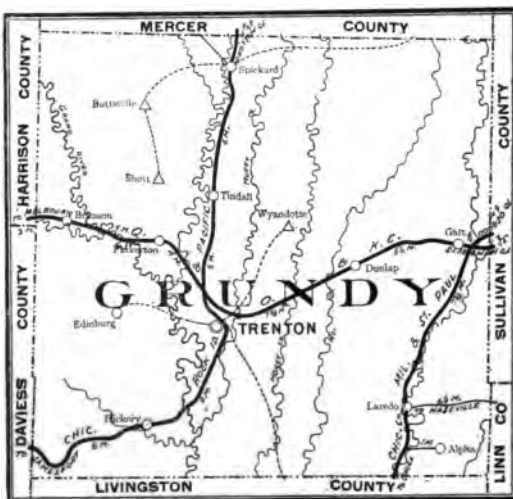
\* Bushels. † Pounds. ‡ Dozen.  
† Tons. § Gallons.

Photos in heading: Rock Island Machine Shops; Pure Bred Hereford Cattle, E. M. Harber.

**TRANSPORTATION:**—Rock Island, main line, Kansas City to Chicago, 26.73; Chicago, Milwaukee & St. Paul, Kansas City to Chicago, 12.64; Burlington, to Quincy, 24.03 miles of taxed roadbed. Rock Island division shops at Trenton, employ to extent of \$50,000 monthly salaries.

**SCHOOLS:**—Trenton High School. Avalon College, one hundred pupils enrolled, at Trenton. In this connection may be mentioned a \$50,000 library, gift to the city by a former citizen.

**WELLS AND WATER:**—In bottom lands wells are driven; sheet water at eighteen to twenty-five feet in inexhaustible quantity. In higher portions cisterns are numerous, because cement is unnecessary for holding the water. Stock water is supplied from creeks and deep windmill wells.



**DUCK SHOOTING:**—Gangs of ducks inhabit rivers and creeks in spring and fall seasons. Snipe shooting is good. Quail, squirrels, and prairie chicken are also found.

**FISH:**—Carp, buffalo, bass, crappie, channel catfish, are plentiful, though they average less than one and one-half pounds, in all streams.

**TOWNS:**—Trenton, electric lights, telephone system, waterworks, all private ownership. Railroad shops, cattle interests, and farming support it. City owns twenty acres well-kept park. Spickard, Galt, Laredo, Brinson, Dunlap, are all supported by farming and live stock.

For further information, address Trenton Commercial Club.

**NEWSPAPERS:**—Trenton Times, Republican, Tribune, Country Editor; Spickard: Grundy County Gazette, North Missouri Poultry Life; Galt Herald; Laredo Herald; Brinson Banner.

**TIMBER:**—Originally forty per cent; one-tenth white oak; one-tenth walnut; balance hickory, elm, ash, cottonwood, hard and soft maple. Three-fourths now cleared.

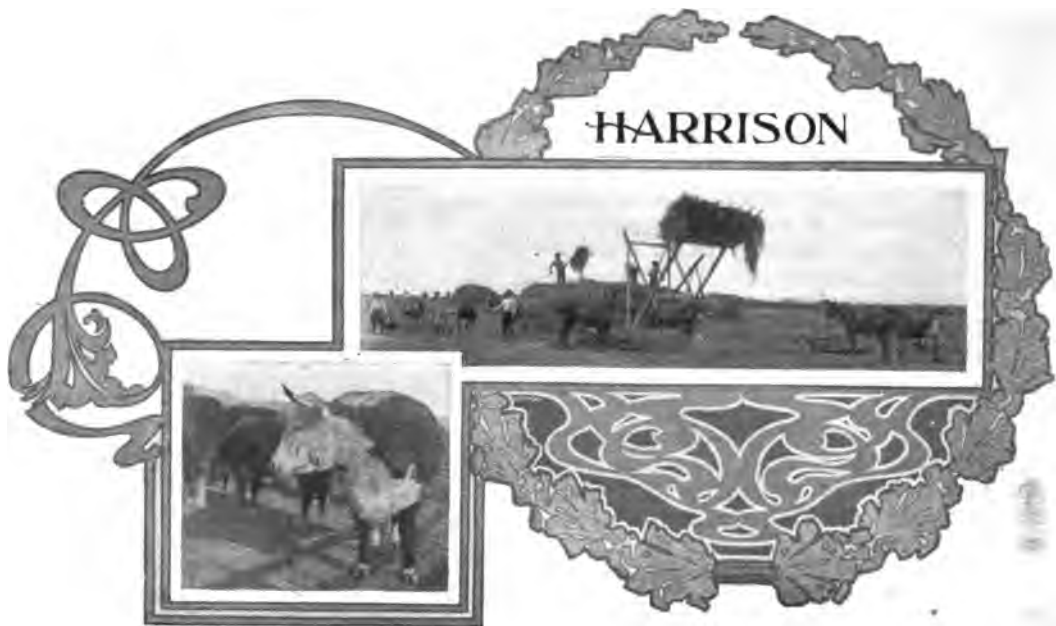
**COAL:**—Production, 34,936 tons a year. Depth, 170 feet; vein, thickness 18 inches; men employed, 160.



WHEAT.



GREEN PASTURES.



**I**N cattle, Harrison ranks among the State's first counties. It borders Iowa; the fourth county east of Nebraska. Total value of beef cattle exceed two millions of dollars, besides the large value to breeders of pure bred Shorthorn, Hereford and Polled-Angus cattle. Horses and mules are leading income products, and, for supplying the immense amount of stock finished for market, one and one-half million dollars worth of corn is produced each year. County contains 730 square miles, 467,200 acres, of which 328,598 acres are now in cultivation. Farms, in number, 3,836, containing on an average of grain lands, pasture, and feed lots, 117 acres each. They are estimated to be worth \$12,608,502. An annual event of importance is the Flower Parade at Bethany, county seat, a vigorous farming town.

POPULATION:—White, 24,347; colored, 51; American born, 24,049; foreign born, 349; total, 24,398; farm homes owned, 2,637; rented, 1,093; other homes owned, 969; rented, 614; total families, 5,313.

FINANCE:—County tax, 40 cents; school tax, average, 50 cents; total assessed valuation, \$8,540,319; one-fourth of actual value of land. No county debt; no township debt.

One-tenth of the original one-third surface covered with hardwood timber has been cleared and reduced to farm lands. Timber was black oak, white oak, hickory, elm, linden, walnut, along Grand river and creeks, which flow southwardly. Several portable saw mills supply rough board hardwood timber for local purposes, \$2 per hundred feet. Sawed posts, 10 cents; cordwood, \$3.50.

Large limestone deposits exist along Trail creek. Stone is used only for local foundation work.

LAND:—As a whole, the surface is that of a billowy prairie. The levellest, a strip of average ten miles in width, extending entirely through the county from north to south, is defined on the east by a line four miles from the east border and parallel with it, together with the northwest one-fourth of the county's square area. Southern half of the first strip brings \$60 to \$70. This land is probably no more productive than the balance, but its undulating slope is seductive

HARRISON COUNTY'S 1902 CROP			
	ACRES	PRODUCT	VALUE
Corn	125,198	5,007,688 *	\$1,577,420
Wheat	2,132	42,640 *	24,530
Oats	9,612	317,437 *	89,530
Hay	66,565	98,850 †	499,350
Forage	13,690	18,255 †	91,275
Broom Corn	36	19,800 †	545
Clover Seed		150 *	825
Grass Seed		18,800 †	29,140
Tobacco	12	10,800 †	1,080
Potatoes	964	123,000 †	29,530
Vegetables	1,365		59,765
Total			\$2,395,870
LIVE STOCK AND PRODUCTS			
KIND	NUMBER	VALUE	
Cattle	64,137	\$2,084,450	
Horses	17,916	1,194,400	
Mules	2,538	190,350	
Asses and Jennets	122	12,300	
Sheep	16,283	54,110	
Swine	69,601	696,010	
Chickens	234,912		
Turkeys	9,175	200,810	
Geese	5,351		
Ducks	2,737		
Swarms of Bees	4,306	13,265	
Honey	143,400 †	17,950	
Wool	0,990 †	11,825	
Milk	4,363,695 ‡	201,000	
Butter	838,937 ‡		
Eggs	1,380,300 ‡	172,525	
Total		\$4,848,895	
* Bushels.	† Pounds.	‡ Dozen.	
† Tons.	‡ Gallons.		

Photos in heading: Haying in Harrison County; Harrison Herefords.

to the eyes of the immigrants from east or north who have for three years been pouring into Harrison. Balance of the prairie, lying mainly as above and in narrow strips between the streams, brings \$40 to \$50; an occasional finding at \$30, and an equal number at \$60. Soil is black prairie loam, from two to three feet deep, over clay subsoil. Billowy prairie brings \$40 to \$55. Hill land of precipitous lay along the creeks brings \$25. Soil is same as on prairie except that it is less deep on ridges. Within a mile of Bethany land has recently sold for \$100. Grand river bottom land sells at \$55 to \$65 an acre.

**VEGETABLES AND FRUIT:**—Soil is peculiarly adapted to vegetables and fruit. Corn, tomatoes and pumpkins are grown for canning factory located at Bethany. Apples, pears, and berries are sure crops, as tested in the year 1903. Half a dozen orchards measure fifty to sixty acres.

**MANUFACTURED PRODUCTS:**—Flour is chief. Mills are located at Bethany, Mt. Moriah, Hampton, and Eagleville. A factory at Cainesville makes implement handles; brooms, and marble monuments are made at Bethany.

**TRANSPORTATION:**—Quincy, Omaha & Kansas City, 11.02; Leon, Mt. Ayr & Southwestern, 35.293; Keokuk & Western, 3.01.

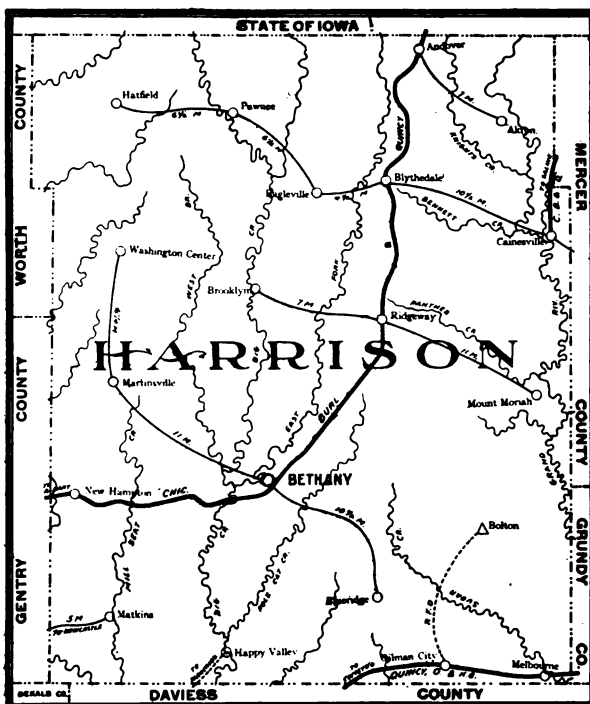
**CHURCHES:**—Represent all Protestant denominations of Christian religion. Christian, denomination has thirty churches in the county. Saloons are not allowed.

Water is obtained in living supply at twelve to forty feet below surface. It is largely limestone. Stock water is supplied from wells by windmill means.

**MINERAL SPRINGS:**—There are two: Crystal Spring and Heilbron Springs, the latter being well improved; location of Heilbron Sanitarium, in city of Bethany. A public spirited citizen of Bethany maintains a private park to which the public is invited.

**TOWNS:**—Bethany: county seat, lighted by electricity; waterworks. Cainesville, Ridgeway, Gilman, New Hampton, Blythedale, Eagleville, live stock centers.

**NEWSPAPERS:**—Bethany Democrat, Republican; New Hampton Herald; Gilman Guide; Ridgeway Journal.





## HENRY

**N**ATURE pre-destined Henry county for agriculture and

stock raising and in addition gave it material which has builded its extensive and distinct industries of tile working and pottery moulding. In physical position the county is third south of the Missouri river and second east of the Kansas line. It is noted for pure-bred cattle and horses, and as the location of

three of the largest and best known flouring mills in this section of the State. Educational advantages are worthy of mention. Clinton High School and Windsor High School head public school systems, the work of which is approved by the State University. Baird College for Young Women is located at Clinton. Railroad facilities are advantageous. Kansas City is but two hours away by rail, and Springfield equally close. The Missouri, Kansas & Texas gives direct line to St. Louis.

POPULATION:—White, 26,962; colored, 1,092; American born, 27,312; foreign born, 742; total, 28,054. Farm homes owned, 2,207; rented, 1,147; other homes owned, 1,497; rented, 1,349; total families, 6,200.

Photos in heading: Clinton Stoneware Co.; White Swan Mills, Clinton; Artesian Lake, Clinton; Banner Mills, Clinton.

### HENRY COUNTY'S 1902 CROP

	ACRES	PRODUCT	VALUE
Corn	124,767	5,177,830 *	\$1,631,015
Wheat	23,590	483,505 *	265,975
Oats	11,464	378,310 *	100,250
Hay	39,075	68,380 †	376,090
Forage	6,355	8,475 †	42,375
Flax	8,535	34,140 *	35,505
Broom Corn	3,190	1,754,500 †	48,250
Clover Seed		1,650 *	9,240
Grass Seed		7,200 *	11,520
Tobacco	22	14,800 †	1,480
Potatoes	799	99,875 *	34,355
Vegetables	1,200		68,545
Total			\$2,620,150

### LIVE STOCK AND PRODUCTS

KIND	NUMBER	VALUE
Cattle	37,136	\$1,206,920
Horses	12,273	818,200
Mules	3,800	285,000
Asses and Jennets	90	9,000
Sheep	3,666	11,000
Swine	54,569	545,690
Chickens	172,561	
Turkeys	6,355	164,345
Geese	5,062	
Ducks	2,709	
Swarms of Bees	2,661	6,365
Honey	88,700 †	11,000
Wool	11,240 †	1,875
Milk	3,198,098 ‡	250,070
Butter	594,464 ‡	
Eggs	1,070,960	133,870
Total		\$3,443,425

\* Bushels. † Pounds. ‡ Dozen.  
† Tons. § Gallons.

**FINANCE:**—County tax, 40 cents; road tax, 15 cents on one hundred dollars valuation; school tax, from 15 cents to \$1.50; average, 50 cents; total assessed valuation, \$8,953,427; real estate is assessed upon one-third basis; personal property at seventy per cent rate; county debt, \$455,000; no township debt.

**TIMBER:**—One-fourth of Henry county was originally timbered, along the water courses. Indicative of the land's natural fertility, the trees were of black walnut, hickory, wild cherry, maple, hackberry, and some black oak and elm varieties. Timber remains in sufficiency for firewood and rough board purposes.

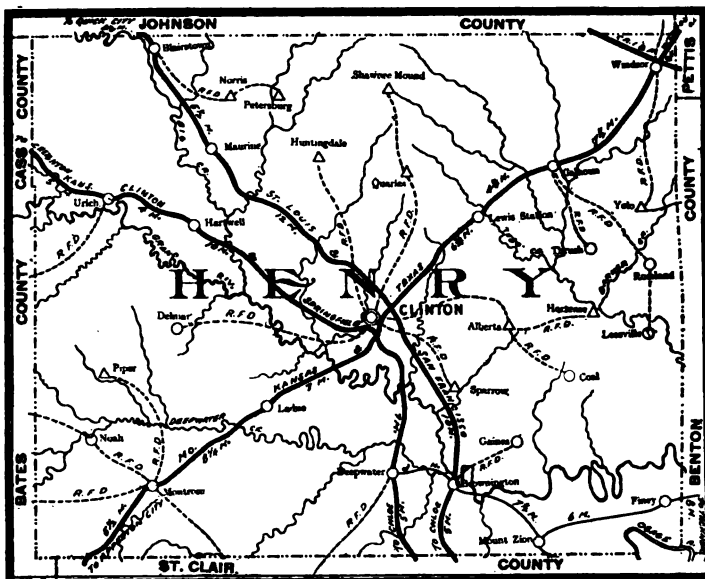
**MINERALS:**—Upon the mineral resources are based two of the largest industrial institutions of the county. Several different kinds of clays are found, one of which is admirably adapted to the manufacture of clay wares. At Calhoun, in the northeastern part of Henry county, for many years has operated a pottery making plant. It gives employment to a large part of the community. At Clinton, in the central part, is located a tile manufacturing plant, one of the largest in the western States. Its product is sold throughout the west and east to the extent of several hundred car loads annually.

**LAND:**—The county contains 740 square miles of land surface, or 473,600 acres. In actual cultivation are 370,976 acres, devoted to the growing of grains common to the temperate zone. A large acreage is devoted to wheat, most of which is consumed by flouring mills within the county. Corn is cultivated in vast quantity. Notwithstanding the enormous live stock feeding within the county, more than one and one-half million dollars worth of corn is annually shipped out. There are 3,447 farms of an average size of 127 acres estimated to be worth, according to present selling figures, \$12,253,050. Grain products and live stock values in aggregate on Henry county farms average in excess of two thousand dollars for each farmer, or \$16 for every acre of land, cultivated, pasture, and timber. Topographically, the county is three-fourths undulating prairie. The exception is found in the stream-adjointing strips. Farms sell at \$30 to \$35 an acre. Three-fifths of the soil is black loam, wherein the land brings \$35. Seven-twentieths is a lighter colored limestone loam where the land sells at \$30. One-twentieth of the land is rough; sells at \$10 an acre.

**TOWNS:**—Clinton, population 5,061, county seat; three railroads; supported by agriculture, stockraising, flouring, clay-working, and mercantile interests. Windsor, population 1,502, agriculture and stockraising. Deepwater, population 1,201, agriculture and stockraising. Montrose, 613; Calhoun, 561; Ulrich, 445; Brownington, 407; all centers of agricultural districts.

**TRANSPORTATION:**—There are three railroads: Missouri, Kansas & Texas, which crosses the county from northeast to southwest; Frisco, and the Kansas City, Clinton & Springfield, which parallel, in right angle to the M., K. & T.

**NEWSPAPERS:**—Clinton: Henry County Democrat; Evening Democrat; Eye; Tribune; Republican. Windsor: Review; Journal. Blairstown Times; Ulrich Herald; Deepwater World; Montrose Recorder; Calhoun Clarion.





**S**TRIKING about Hickory county is the beauty and low price of its prairie lands. It is characterized by four alternating strips of undulating prairie and rough lands, of north and south trend. Beginning at the west side of the county, prairie of undulating type extends one-fourth across, followed successively by strips of rough breaks of Pomme de Terre river, prairie, and foothills of an Ozark unevenness which break through the border of Camden county. Corn, hay, cattle, horses, hogs, and milk and butter are chief products from 1,768 farms, averaging 1,233 acres, embracing in aggregate 101,897 acres of cultivated land. County contains 415 square miles of surface, equal to 265,600 acres, valued at \$2,349,940.

**POPULATION:**—White, 9,984; colored, 1; American born, 9,793; foreign born, 194; total, 9,985. Farm homes owned, 1,248; rented, 472; other homes owned, 197; rented, 114; total families, 2,031.

**FINANCE:**—County tax, 50 cents on one hundred dollars; school tax from 10 cents to 90 cents; average, 42 cents; total assessed valuation, \$2,224,366; assessed valuation per cent of real valuation, 60; no county debt; no township debt.

**TIMBER:**—Two-thirds originally; one-fourth cleared. Hickory, black oak, post oak exist in commercial quantities, since timber has been little removed except in clearing land. White oak, elm, wild cherry, walnut, and black-jack are prominent varieties. Saw mills have ever been of size comparing to local demand.

**MINERALS:**—Iron, zinc and lead, coal, limestone, and oil. First four are found in small pockets, zinc and lead principally near Pittsburg. Pockets soon exhausted have been worked at several points upon Pomme de Terre river. Oil excitement once prevailed, based upon indications near Quincy. Limestone for local foundations is found upon river and creeks.

**LAND:**—The two prairies, one upon the west side of Pomme de Terre river being twice the size of that upon the east side, embrace one-third of county. Soil is black, prairie loam, one to two and a half feet in depth. Prices range from \$20 to \$30 an acre, being highest in vicinity of Weaubleau, a railroad point. The western prairie is gently undulating; the eastern slightly less so. Prices in former exceed those for similar land of latter location, \$2.50 to \$5 an acre, owing to railroad facilities of the western side of the county. Two-thirds of Hickory is timber land, three-fourths of which is now tree bearing. This three-fourths of two-thirds may be had at \$7 to \$10 an acre. Heaviest timber is upon the eastern border. Soil is clay, mixed with gravel and surface stone. Wheat is peculiarly favored of this soil. The cleared timber lands are creek and river bottoms. Soil is black or brown, endless depth, sometimes bearing few surface

HICKORY COUNTY'S 1902 CROP			
	ACRES	PRODUCT	VALUE
Corn	39,985	1,899,745 *	\$ 412,845
Wheat	8,949	142,185 *	78,750
Oats	5,645	169,350 *	44,875
Hay	14,245	21,370 †	106,850
Forage	1,935	2,420 †	12,100
Flax	35	210 †	215
Broom Corn	18	6,500 †	190
Clover Seed		220 *	1,230
Grass Seed		660 *	1,080
Tobacco	7	4,900 †	465
Potatoes	898	49,125 †	15,720
Vegetables	470		24,985
Total			\$ 699,245

LIVE STOCK AND PRODUCTS		
KIND	NUMBER	VALUE
Cattle	14,669	\$ 403,400
Horses	5,176	310,560
Mules	1,018	68,170
Asses and Jennets	41	8,690
Sheep	5,745	17,225
Swine	20,203	202,040
Chickens	89,259	
Turkeys	1,692	
Geese	2,624	49,055
Ducks	805	
Swarms of Bees	656	1,130
Honey	21,867	2,735
Wool	18,250	3,040
Milk	1,250,832 †	70,285
Butter	223,642 †	
Eggs	653,980	81,745
Total		\$ 1,211,035

* Bushels.	† Pounds.	Dozen.
‡ Tons.	\$ Gallons.	

Photo in heading: Dairy Barns and Cooling House of J. M. England, Hermitage.

rock. Corn is principal product. Prices, \$25 to \$35. No damaging overflows.

**MANUFACTURED PRODUCTS:—**Flour, railroad ties, and hardwood lumber for demand within county.

**TRANSPORTATION:—**The Frisco railroad has 7.42 miles taxed roadbed. Gives direct service to Kansas City and Springfield. Extension of Missouri Pacific from Warsaw to Springfield is feasible, and likely. Pomme de Terre river is used for railroad tie transportation to Warsaw, making connection with Missouri Pacific railroad. Steel bridges cross river in most frequented points. There is no toll.

**CHURCHES:—**Weaubleau, Cross Timbers and Hermitage have two each; Wheatland has three Protestant churches. Weaubleau Christian Institute is the leading educational institution; co-educational; enrolls one hundred pupils.

**WATER:—**On prairies, wells reach limestone water at 40 to 50 feet. In hills springs are used. Ponds are dug for live stock on prairies.

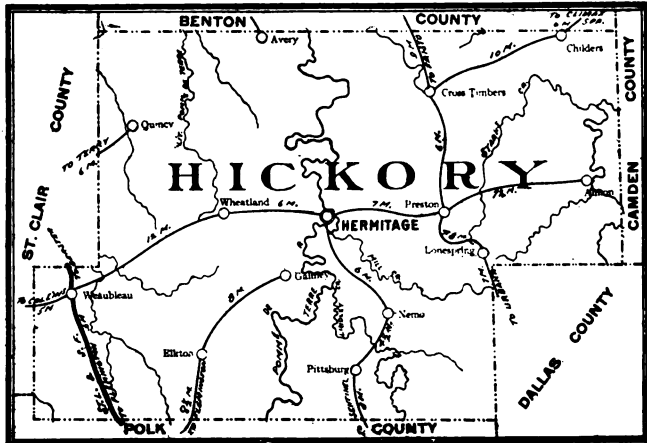
**FISH AND GAME:—**Catfish weighing fifty pounds have been caught in Pomme de Terre river. This river and Little Niangua are stocked with buffalo, bass, drum, suckers, redhorse and jack salmon. Wild turkeys are largest game.

**DAIRYING:—**Farmers are rapidly taking to dairying, owing largely to the adaptability of climate and land lay. Near the railroad on the west side of Hickory county are several farms contributing daily to Kansas City dairy markets.

**FUR INDUSTRY:—**Otter and mink are trapped in winter, the fur industry amounting to considerable.

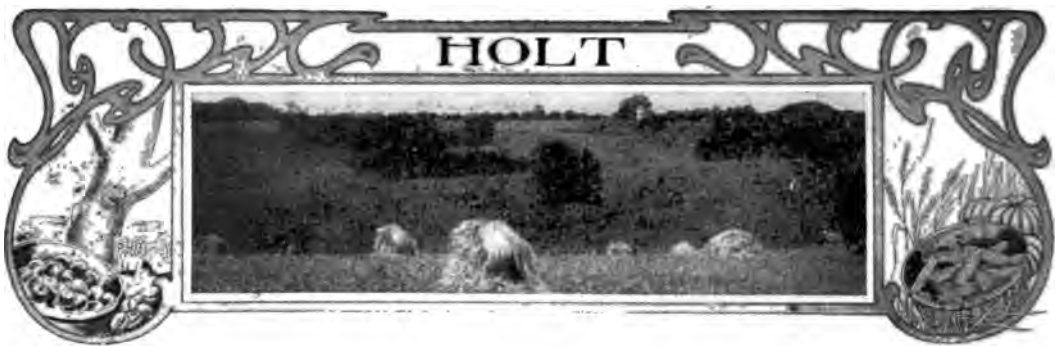
**TOWNS:—**Weaubleau, largest railroad town; Hermitage, county seat; Wheatland, Cross Timbers, centers of respective farming districts.

**NEWSPAPERS:—**Hermitage Index; Weaubleau Leader; Hermitage Republican.



SAW MILL, HICKORY COUNTY.





**O**VERTOWERING attainments of Holt county are intellectual, agricultural, horticultural. Art, music, literature hold high esteem. Corn production reaches a total value of one and one-half million dollars a year. Fruit never fails. Loess land bluffs of Missouri river insure against drought injury. Fruit is sold in orchards, made into cider, jellies and fruit butters. Cattle, horses and mules, hogs, dairy products, oats, hay, potatoes and poultry are large products. There are many poultry fanciers resident who hold at Oregon, county seat, an annual meet. Land area, 462 square miles, 295,680 acres, of which 224,996 acres are in a high state of cultivation. Number of farms, 2,256; average size, 117.9 acres; estimated actual valuation, \$10,485,180.

**POPULATION:**—White, 16,945; colored, 138; American born, 16,473; foreign born, 610; total, 17,083. Farm homes owned, 1,395; rented, 809; other homes owned, 799; rented, 728; total families, 3,731. Foreign population is German, occupying property mainly in northwest and southeast section of county.

**FINANCE:**—Tax for county purposes, 30 cents; road, 10 cents; special road and bridge, 15 cents; average school tax, 49 cents; assessed valuation, \$7,555,854; average per cent valuation real estate, 30; personal, 40; no county debt; no township debt.

**TIMBER:**—Originally covered two-thirds surface, along Missouri and Nodaway river bottoms and along bluffs of former. Less than ten per cent is now timbered. Cordwood, \$4, delivered. Present timber is in south and east sections. Walnut, locust, elm, sumach, willow, maple, box elder.

**LIMESTONE AND SAND:**—Former in great quantities is deposited along Missouri river bluffs. No quarries. Sand is plentiful; used locally.

**LAND:**—Three kinds: river bottoms, prairie, silt bluffs. More than one-third is river bottoms. That along the Missouri river is practically bounded by the Kansas City, St. Joseph & Council Bluffs railroad. Nodaway river bottoms are two to four miles wide. Soil is black, sandy loam, of endless depth. For one-half this land \$50 an acre is asked. One-tenth, adjoining Missouri river, may be bought for \$30; three-tenths of bottoms sells at \$60; remaining one-tenth at \$75. One-fourth of county is billowy prairie, where land now selling brings \$65 to \$80. Adjoining Maitland and Mound City, where it lays levellest, farms are bringing \$90 to \$100. Some finely improved farms at outskirts of these towns have sold for \$125 recently. A small per cent, say one-fifth of this prairie, approaching the once timbered hills, may be had at \$50. Soil is two to four feet, adapted to cereals and grasses and vegetables. For ten miles up the Nodaway, beginning at its mouth and bounding the Missouri bottoms, are steep bluffs, with adjacent hills, little less precipitous. This land to ex-

HOLT COUNTY'S 1902 CROP			
	ACRES	PRODUCT	VALUE
Corn	113,449	5,105,205 *	\$1,608,140
Wheat	9,086	163,765 *	94,165
Oats	15,470	402,220 *	104,575
Hay	92,003	15,645 †	117,340
Forage	2,170	2,896 †	14,475
Broom Corn	40	2,200 †	605
Clover Seed		125	690
Grass Seed		950 *	1,475
Tobacco	55	49,500 †	4,950
Potatoes	1,108	138,500 *	33,240
Vegetables	1,390		39,750
Total			\$2,019,405

LIVE STOCK AND PRODUCTS		
KIND	NUMBER	VALUE
Cattle	29,656	\$ 963,820
Horses	9,266	617,735
Mules	2,617	196,275
Asses and Jennets	30	3,000
Sheep	4,345	14,485
Swine	98,886	998,960
Chickens	135,920 †	
Turkeys	1,436	
Geese	2,365	131,130
Ducks	3,255 †	
Swarms of Bees	2,572	6,165
Honey	85,733 †	10,717
Wool	17,600 †	2,935
Milk	2,814,523 †	128,380
Butter	404,028 †	
Eggs	845,390 †	105,675
Total		\$3,179,157

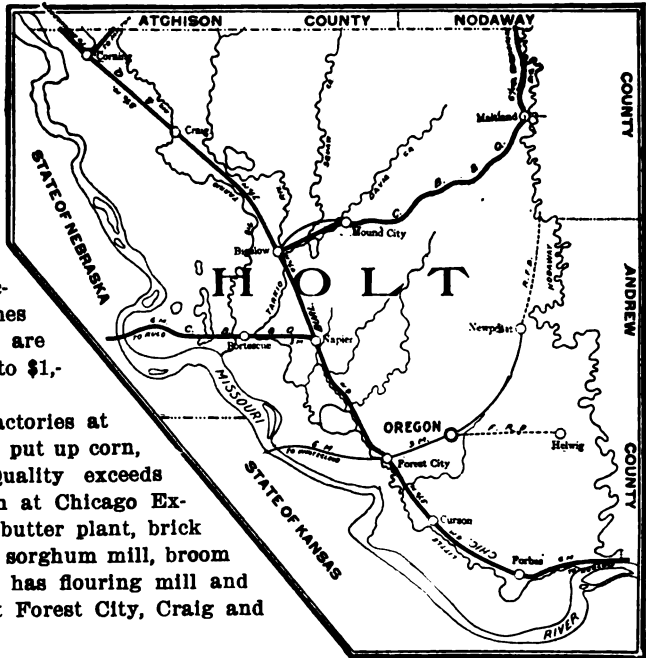
  

* Bushels.	† Pounds.	Dozen.
† Tons.	\$ Gallons.	

Photo in heading: Panorama of Holt County.

extent of one-tenth of county is to be had at \$25 to \$35 an acre. Strips defined shade into hill land which amounts to one-third the county, worth on average \$50 to \$60. Close to Oregon it is higher in price, purely on account of location. Few farms adjoining Oregon have brought \$100. Fruit thrives here. Acreages yield incredibly large dividends and are therefore practically not on market. Farm homes frequently cost \$5,000. Barns are large. Real estate sales amount to \$1,543,000, within the past year.

**MANUFACTURES:**—Canning factories at Oregon, Mound City, Forest City; put up corn, tomatoes, apples, pumpkins. Quality exceeds quantity. First prizes were won at Chicago Exposition. Cider, jelly, and fruit butter plant, brick yard, cigar factory, flouring mill, sorghum mill, broom factory at Oregon. Mound City has flouring mill and cigar factory. Flouring mills at Forest City, Craig and Maitland.



**TRANSPORTATION:**—Atchison & Nebraska, 2.90; St. Joseph & Nebraska (continuation), 5.86; Kansas City, St. Joseph & Council Bluffs, 59.46 miles taxed road. Dirt road grading is a feature.

**CHURCHES AND SCHOOLS:**—Three largest towns have fifteen churches, all denominations. High Schools: Oregon, Mound City, Maitland.

School rooms in county, 109; school houses, 79.

Mound City, because of mineral spring and Big Lake, near Bigelow, are favorite points for pastime. At Big Lake is crapple, bass and trout fishing; boat house; duck shooting.

**Towns:**—Oregon, county seat, electric lights, waterworks, park; annual chrysanthemum show; Mound City, electric lights, waterworks, park; Maitland, prairie town; Craig, Forest City, New Point, Bigelow, Corning, Forbes, all farming centers.

**NEWSPAPERS:**—Mound City News, Jeffersonian; Maitland Herald; Craig Leader; Bigelow Enterprise; Forest City Star; Oregon Sentinel.

**AN ARTIST WITH THE ROPE.**



A TYPICAL THRESHING SCENE.





**H**OWARD is one of Missouri's mother counties. It was early settled and from its borders have gone out men who laid and maintained the foundations of other counties in the State. It is notable for its great men produced, its schools and homes and fine live stock. The county is situated upon the north bank of the Missouri river, midway the State east and west. Cattle is the chief item of export. There are more pure bred Aberdeen-Angus and Brown Swiss cattle in Howard than in any other Missouri county, and there are many Shorthorn and Hereford herds. Much wheat is grown. Three of the oldest colleges of the State are located at two leading towns. In square miles the county measures 450. There are three kinds of soils. Of the 288,000 acres, 213,894 acres are included in improved farms. Number of farms, 2,037, averaging 140.2 acres, worth in aggregate, according to present selling prices, \$7,905,630.

**POPULATION:**—White, 14,155; colored, 4,182; American born, 18,014; foreign born, 423; total, 18,337. Farms homes owned, 1,457; rented, 542; other homes owned, 763; rented, 1,085; total families, 3,847.

**FINANCE:**—County 40 cents on the one hundred dollars; school tax, 20 cents to \$1.35, average, 49 cents; total assessed valuation, \$6,857,716; thirty-five per cent of actual valuation. No county debt. Chariton township owes \$15,000.

**TIMBER:**—One-half of the county was originally timbered. Species indigenous are walnut, all the oaks, hickory, sycamore, linwood, elm, cottonwood and maple. Three-fifths of the timbered lands bore large growth trees; two-fifths of the trees were of the hoop-pole size.

**MINERAL:**—Coal has been mined for a great many years. Annual production is 4,350 tons. There are two veins, the upper, thinner one now being worked. It is from eighteen to forty inches thick. Limestone is found in the bluffs along the Missouri river.

**SALT WATER:**—Ordinarily the water of the county is limestone seepage. In certain springs, however, is found water heavily charged with salt. For many years this was a means of salt supply. The water deposits two tablespoonsful of salt to the gallon.

**LAND:**—There are three types of land, as well as three kinds of soil. One-tenth of the county is Missouri river bottom alluvium, deep, black, fertile. It

HOWARD COUNTY'S 1902 CROP			
	ACRES	PRODUCT	VALUE
Corn	55,503	2,608,841 *	\$ 769,550
Wheat	43,481	956,586 *	526,120
Oats	2,732	84,690 *	22,440
Hay	25,613	43,540 †	278,658
Forage	1,680	2,035 †	10,175
Broom Corn	11	5,500 †	150
Clover Seed		2,400 †	13,440
Grass Seed		148 *	260
Tobacco	69	48,300 †	4,590
Potatoes	561	75,735 *	24,235
Vegetables	740		44,580
Total			\$1,694,145
LIVE STOCK AND PRODUCTS			
KIND	NUMBER	VALUE	
Cattle	25,889	\$	841,395
Horses	8,019		584,600
Mules	4,321		324,075
Asses and Jennets	176		22,000
Sheep	11,637		84,880
Swine	41,460		414,000
Chickens	119,386		
Turkeys	6,892		110,555
Geese	3,059		
Ducks	1,343		
Swarms of Bees	1,356		2,920
Honey	47,267 †		5,660
Wool	53,170 †		8,860
Milk	1,902,840 †		136,515
Butter	348,718 †		
Eggs	674,630		84,315
Total			\$ 2,520,375
* Bushels.	† Pounds.	Dozen.	
† Tons.	\$ Gallons.		

Photo in heading: At the Hour of Eve.

seldom overflows, and never is injured by overflow. Farms are well improved and sell for \$50 an acre. One-fifth of the county is white oak land of loess character, whereon fruit thrives. It interlies the alluvium along the river and the soil upon the prairie in the northeastern one-half. Farms here may be bought at \$25 an acre, on the average. Seven-tenths of the county is upland which brings an average of \$40 an acre. Most of it is prairie, though in some parts it was once covered with a dense growth of heavy timber. Blue grass is native to it all and will choke out all other grasses if the land be pastured.

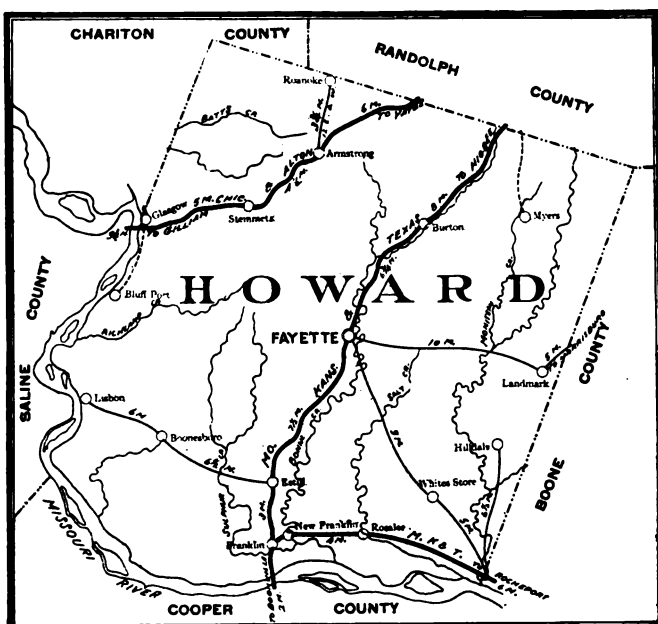
**FLOURING MILLS:**—The only manufactures of the county are flouring mills. There are many acres devoted to wheat growing, hence are found within the county several large and many smaller flouring and feed mills.

**TRANSPORTATION:**—Chicago & Alton main line, Kansas City to the east; Missouri, Kansas & Texas main line; Wabash connection is had by the town of Glasgow.

**SCHOOLS:**—There are three first class colleges. Central College at Fayette, chartered 1855, twenty acre campus; 6,000 volumes in library. This school is the head of those educational institutions in the west under control of the General Board of Education of the Methodist Episcopal church, South. It is a member of the Missouri College Union. Howard-Payne College, located at Fayette, is a boarding school for young women, and of high standing. Pritchett Institute and Observatory, located at Glasgow, is a well known college of reputation. It is co-educational, and is distinguished chiefly because of its observatory work. There are splendid high schools at Fayette, Glasgow, and New Franklin.

**TOWNS:**—Fayette, county seat, school town, population, 2,717. Glasgow, river town, population, 1,672. New Franklin, railroad junction, population, 1,156. Armstrong, 461. Roanoke, 147. These are all incorporated and are supported mainly by being trading centers of their respective live stock and general farming communities.

**NEWSPAPERS:**—Fayette Advertiser, Democrat-Leader; Glasgow Missourian, Globe, Echo; Armstrong Herald; New Franklin News.



CENTRAL COLLEGE, FAYETTE.



**T**HE largest peach growing county in Missouri is Howell, situated upon the Arkansas border, half way across the State. Its lay is uneven, soil clay and its surface, excepting the valleys, covered with small rocks. Agriculturally, 153,710 of its total 588,800 acres are under plow. West Plains, county seat, population, 2,902, and Willow Springs, railroad junction, population 1,078, are trading centers and distributing points felt far beyond their county confines. Schools are a feature. Grapes are grown in vast quantities. Manufacturing thrives, incident to horticultural interests.

**POPULATION:**—White, 21,612; colored, 222; American born, 21,416; foreign born, 418; total, 21,834. Farm homes owned, 3,834; rented, 715; other homes owned, 599; rented, 738; total families, 5,886.

**FINANCE:**—County tax 50 cents for general revenue and 10 cents for roads; school tax from 5 cents to \$1.40, average, 71; total assessed valuation, \$3,829,898; assessed valuation per cent of actual value, 50; no county debt; no township debt.

**TIMBER:**—Formerly the entire surface was timbered, though never densely so. In northern one-fourth much pine was found; balance of land principally covered with white, black, and post oak, black-jack and hickory. Mountain View is now the lumbering center. Wild timber is fast being succeeded by peach trees and grape vines.

**MINERALS:**—Carbonate of zinc, iron, silver and gold have been found. Carbonate of zinc exists in large quantities in southwest Howell, eighteen miles from railroad. Iron all over county. Mines central. Limestone deposits of worth exist in every township. Blue sandstone is found one mile from West Plains. Kaolin deposits seven miles northeast of West Plains; unworked.

**LAND:**—Square miles 920; number of farms, 3,065; average acreage, 136.1; total value, \$3,525,280. Located upon south slope of Ozark mountains. In stage of settlement and commercial development, in advance of most south Missouri counties. Land nearly all rock covered, but some of best valley lands are almost free therefrom. North half of county, together with that portion in south described by the three lower congressional townships adjoining Ozark county comprises the roughest land. Here are found most sur-

HOWELL COUNTY'S 1902 CROP			
	ACRES	PRODUCT	VALUE
Corn	47,686	1,625,952 *	\$ 572,230
Wheat	36,605	366,050 *	215,970
Oats	4,322	108,050 *	36,015
Hay	11,822	17,735 †	159,615
Forage	1,125	1,310 †	6,550
Broom Corn	26	18,000 †	380
Clover Seed		85 *	470
Grass Seed		80 *	65
Cotton	520	156,000 †	11,700
Tobacco	102	72,420 †	7,240
Potatoes	738	69,635 *	39,425
Vegetables	855		36,500
Total			\$1,080,140
LIVE STOCK AND PRODUCTS			
KIND	NUMBER	VALUE	
Cattle	15,360	\$ 384,000	
Horses	6,205	377,700	
Mules	2,275	136,500	
Asses and Jennets	42	3,780	
Sheep	10,145	30,435	
Swine	28,620	286,200	
Chickens	82,631	68,140	
Turkeys	2,890		
Geese	2,358		
Ducks	1,777		
Swarms of Bees	818	2,218	
Honey	27,267 †	3,408	
Wool	31,350 †	5,225	
Milk	2,196,528 †	150,290	
Butter	436,122 †	78,475	
Eggs	627,180 †		
Total		\$1,526,371	
* Bushels.	† Pounds.	Dozen.	
† Tons.	§ Gallons.		

Photo in heading: Howell County's Leading Crops.

face rock. Upon this character of land are located the largest and best orchards. It may be bought at \$1.50 to \$5 an acre, except it adjoins the railroad, in which case it sells at \$10 to \$12.50. This land is timbered. Interspersing this land are found streamless valleys, comprising perhaps one-twelfth the surface, worth \$15 to \$25. In the balance of the south half not heretofore included are found the farm lands of county. In Howell Valley and adjoining the Frisco, are ten thousand acres of farms ranging in price from \$35 to \$45 an acre. Suburb to West Plains land reaches \$75 an acre. Good creek bottom lands elsewhere in the south half of county may be had at \$10 to \$20 an acre. Soil is universally dark brown clay, with lighter colored subsoil.

**MANUFACTORIES:**—Local in capacity, and incident to fruit, mining and living necessities. Include, at West Plains, two large flouring mills, woolen mills, vinegar works, canning factory, feed mill, ice plant, distillery, two brick yards, machine shop, wagon and carriage factory, zinc oxide plant, cigar factory, two planing mills.

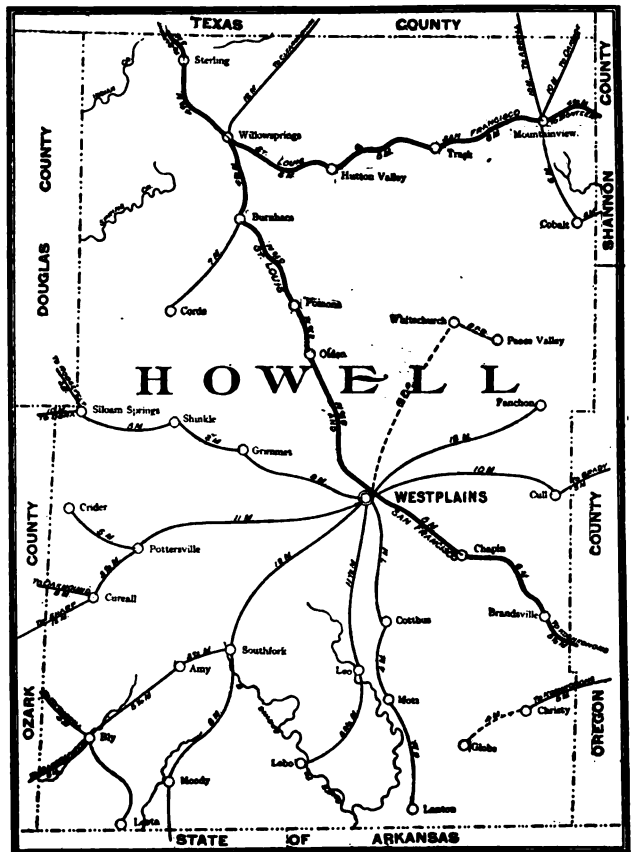
**TRANSPORTATION:**—Frisco, 39.75; Frisco, Current river route, 18.97 miles taxed roadbed.

**SCHOOLS:**—West Plains has school system embracing three ward and high schools. West Plains College is an academic school with 75 enrolled. Willow Springs Academy, preparatory school; 50 enrolled.

**SPRINGS:**—Siloam and Cureall springs are of reputed medicinal value.

**TOWNS:**—West Plains, on main line Memphis-Springfield Frisco railroad; good schools; twelve churches, small park, waterworks, electric lights, fine hotel; opera house, baseball park, social club rooms, public library, Chautauqua circle. Willow Springs, railroad town, junction of Frisco Springfield-Memphis line and Current River route; electric lights, waterworks, telephone. Siloam Springs; Burnham; Mountain View; Olden; Hutton. Horticulture and agriculture are main supports of each.

**NEWSPAPERS:**—West Plains Gazette, Journal, News, Quill; Willow Springs Index, Republican; Mountain View Postman.



BURBO AND BOY.

# IRON



**I**RON county receives its name from the vast amount of iron ore which it has supplied. It is famous as the location of Pilot Knob, a mountain peak seven hundred feet higher than its valleys, from which two million tons of iron have been taken; for Shepherd mountain, eight hundred feet high; and for other high peaks which have furnished large quantities of iron. County is third south of Missouri river and fourth west of Mississippi river, and is adjacent to Missouri's greatest lead mining district. In Arcadia Valley is found the same geological formation which characterizes the district centering at Mine La Motte, one of the oldest and largest lead mines in the

Mississippi valley. Granite is a second mineral asset of importance. Other claims to distinction are in both hardwood and pine lumber resources, and also in the fact that it is the location of many summer homes of people living chiefly in St. Louis. Three miles southeast of Ironton the United States government owns a tract of land used as a rifle range by troops stationed at Jefferson Barracks, suburban to St. Louis. In the city of Ironton, county seat, is erected a bronze statue of General U. S. Grant, commemorating the spot where he received his military commission. There are 550 square miles of land in Iron county, 352,000 acres, of which the farming area represents 44,784 acres in cultivated land. There are 880 farms embracing an average of 116.2 acres of lands of different descriptions. They represent an actual aggregate of \$2,145,770.

**POPULATION:**—White, 8,468; colored, 248; American born, 8,393; foreign born, 323; total, 8,716. Farm homes owned, 646; rented, 197; other homes owned, 401; rented, 442; total families, 1,686.

**FINANCE:**—County tax, 40 cents on one hundred dollars valuation; school tax from 15 cents to 60 cents, average, 40 cents; total assessed valuation \$2,623,620; assessed valuation per cent of actual valuation, 60; no county debt; no township debt.

**TIMBER:**—Eighty-five per cent of county bears timber, most of this acreage having timber of commercial

IRON COUNTY'S 1902 CROP			
	ACRES	PRODUCT	VALUE
Corn	11,977	320,368 *	\$ 123,515
Wheat	2,717	35,320 *	20,840
Oats	1,393	30,045 *	10,215
Hay	8,219	12,330 †	117,135
Forage	465	540 †	2,700
Clover Seed		80 *	110
Tobacco	23	16,830 †	1,635
Potatoes	281	25,290 *	11,140
Vegetables	215		9,780
<b>Total</b>			<b>\$297,070</b>
LIVE STOCK AND PRODUCTS			
KIND	NUMBER		VALUE
Cattle	8,245		\$ 185,512
Horses	1,665		99,900
Mules	780		46,800
Asses and Jennets	10		900
Sheep	3,075		9,225
Swine	8,446		84,460
Chickens	25,082		
Turkeys	686		17,015
Geese	1,737		
Ducks	1,390		
Swarms of Bees	723		1,854
Honey	24,100 †		3,013
Wool	8,200 †		1,387
Milk	661,062 \$		60,909
Butter	127,673 †		
Eggs	138,510		17,315
<b>Total</b>			<b>\$529,851</b>
* Bushels.	† Pounds.	Dozen.	
† Tons.	\$ Gallons.		

Photo in heading: Broad Eddy and Bluff, Big Piney River.

size. From eleven to fifteen millions of feet of hardwood lumber are shipped annually. Black oak represents forty per cent of timber standing; white oak an equal amount; pine five per cent, estimated to represent \$155,000 worth of raw material; and the balance is small growth hickory, walnut along streams, sycamore and elm. Along the railroad the large size timber has been cut. Pine appears in extreme western end of Iron county and borders the west side of the principal hardwood forest covering nearly the entire western length.

**MINERALS:**—Iron has been produced since 1847. Pilot Knob, Shepherd mountain, Cedar mountain, Buford mountain, Russell, and Shut-In are the chief sources. Indications spread over entire surface. Marble, granite, lead, copper, limestone, sandstone, fire clay and kaolin are deposited. In Bellevue valley, in northeastern corner is found a superior granite in immense quantities. It is of the sort found in the new Washington University buildings at St. Louis.

**LAND:**—For general agricultural purposes, the best lands are located in Bellevue valley in the northeastern part of the county, west of Buford mountain and north of Graniteville. Area comprises thirty square miles of fertile, red limestone clay soil, free from the flint fragments so common in upland district. Another section of fertility same as above but of less area is famous Arcadia valley, location of Ironton and Arcadia. These valleys are merely lowlands independent, in point of origin, of the streams which may be flowing through them. Soils are alluvial. Good land for farming is located about the upper waters of Marble creek. In south and west, county is very broken and rocky. Best improved lands are bringing \$25 to \$40 an acre; ridge land \$5 to \$15. Unimproved, timbered, best, \$3 to \$5; remainder from 50 cents to \$2.50. Government land, 8,242 acres.

**MANUFACTORIES:**—Flouring mills, saw mills, hub and spoke factories, screen door factory and granite working plant.

**TRANSPORTATION:**—St. Louis, Iron Mountain & Southern, main line north to south.

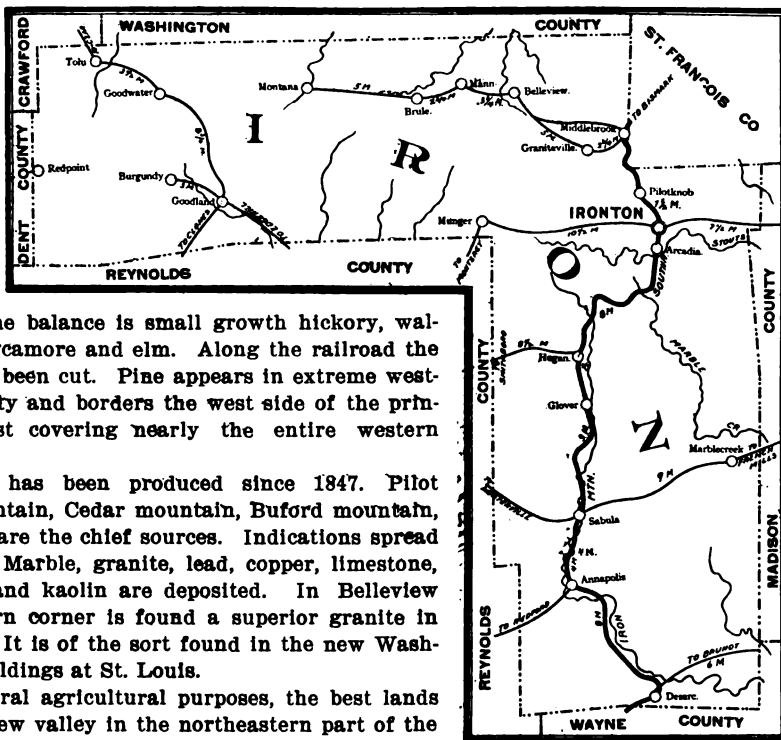
**MINERAL SPRINGS:**—At Annapolis, in south county. Arcadia, mile south of Ironton, is a summer resort of note, especially for St. Louisans. Summer homes are maintained here and at Ironton. Both towns are within the shadow of picturesque Iron mountain. Perquisite to life here are fishing and hunting.

**TOWNS:**—Graniteville, 846 people, ships 500 to 600 cars of granite annually;

Ironton, county seat, 797, mining, manufacturing and farming; Arcadia, summer resort, schools and manufacturing; Pilot Knob, 455, mining; Des Arc; Bellevue; Vulcan, Middle Brook, Sabula and Jordan.

**SCHOOLS:**—Arcadia College, and Ursuline Academy at Arcadia.

**NEWSPAPERS:**—Iron Register.



WHERE THE HILL SLOPES DOWN  
TO THE WATER'S EDGE.





UPON the south bank of the Missouri river, at the western point where the

stream begins its flow across the State, is Jackson county, Missouri. In the northwest corner of Jackson county is Kansas City, second city in size in the State and twenty-second among the municipalities of the United States. This suburban condition, coupled with the remarkable natural fertility of all soils and topo-

graphies presented, encourages fancy farming in the north and west and general live stock feeding and stock breeding elsewhere in the county. Another consequence of a great city within its borders is the location of many fine homes, 225 miles of rock roads and drives and electric lines linking suburb and city. Jackson county contains 630 square miles of land, 403,200 acres, of which 284,122 acres are under high state of cultivation. Number of farms, 3,681; average size, 97.5 acres; estimated actual valuation, according to market price, \$22,642,725. Fine horses and cattle aggregate the amount of two and one-half million dollars. Farms produce a total of corn amounting each year to one and a half million dollars. Milk and butter amount annually to almost another million dollars.

POPULATION:—White, 176,053; colored, 19,140; American born, 175,140; foreign born, 20,053; total, 195,193. Farm homes owned, 2,097; rented, 1,536; other homes owned, 10,337; rented, 28,124; total families, 42,094.

FINANCE:—County tax, 35 cents on one hundred dollars valuation; school tax from nothing to \$1.10, average 46; total assessed valuation, \$114,730,819; assessed valuation per cent of actual valuation, 40; county debt \$150,000; township debt, \$104,000.

JACKSON COUNTY'S 1902 CROP			
	ACRES	PRODUCT	VALUE
Corn	115,254	4,879,852 *	\$1,379,590
Wheat	24,981	624,525 *	359,100
Oats	8,382	276,806 *	71,915
Hay	36,181	54,270 †	379,890
Forage	5,995	7,938 †	59,975
Flax	1,960	19,600 *	20,385
Broom Corn	4	2,200 †	60
Clover Seed		2,500 *	13,750
Grass Seed		1,150 *	1,785
Tobacco	13	11,700 †	1,170
Potatoes	2,508	363,660 *	87,280
Vegetables	3,215		186,790
Total			\$2,543,690
LIVE STOCK AND PRODUCTS			
KIND	NUMBER	VALUE	
Cattle	50,091	\$1,627,965	
Horses	14,490	966,000	
Mules	3,598	269,850	
Asses and Jennets	151	15,100	
Sheep	17,479	58,265	
Swine	74,409	744,090	
Chickens	245,690		
Turkeys	9,314		
Geese	3,485	176,860	
Ducks	4,515		
Swarms of Bees	3,428	11,895	
Honey	114,267 †	14,285	
Wool	61,540 †	11,025	
Milk	6,570,662 †		
Butter	947,009 †	821,425	
Eggs	1,388,730 †	173,590	
Total		\$4,891,240	
* Bushels.	† Pounds.	Dozen.	
† Tons.	\$ Gallons.		

Photos in heading: Country Place of James Fraser, Independence; An Independence Boulevard.

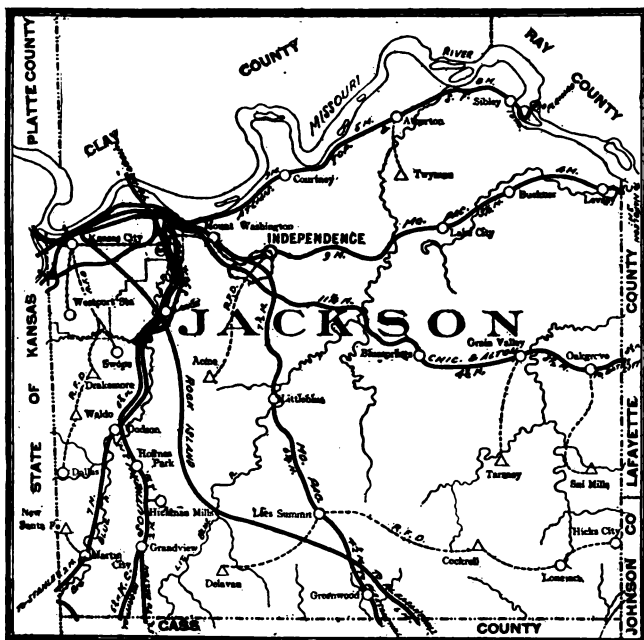
**MINERALS:**—Two miles southeast of city limits of Kansas City coal is mined. Shaft is 320 feet deep; annual production, 21,000 tons; vein is eighteen inches thick. Coal is underlaid by fire clay mining. Sixty men employed.

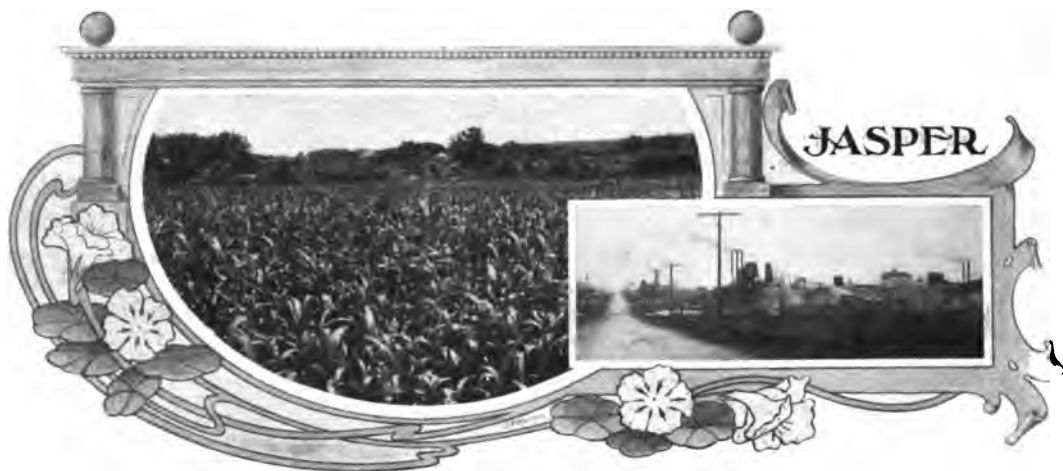
**LAND:**—Along the north line flows the Missouri river which gives Jackson many hundreds of acres of bottom land, rich, sandy loam. Two smaller rivers cut the county north and south extending this acreage in two parallel strips. South from the north line the land is rolling and was at one time heavily timbered. Along the Blue river timber still stands upon acreages to which is confined the rough land of the county. Ten miles south from the Missouri river begins the unbroken stretch of prairie, embracing one-half of the county area and every foot cultivable. Within five miles of Kansas City along the rock roads land is divided into gardens and is worth from two to five hundred dollars an acre. Prairie land within three miles of a rock road sells at \$100 to \$250 an acre. Average farm east of a line ten miles east of Kansas City will cost the buyer \$125 an acre. Small acreage of rough land may be had at \$40 an acre. Bottom lands are, of course, alluvial; hill lands are coated with a black soil of one to four feet, of remarkable fertility. Topography makes no material difference in price of land.

**Rock Roads:**—Built of native limestone, twelve to eighteen feet wide, driveway of dirt alongside. Roads built within past twelve years at a cost of \$2,000,000. Rock preparation is sixteen inches thick. Independence is ten miles east of Kansas City, connected by two lines of rock roads. From this county seat town run, in every direction, seven trunk line roads, and from Kansas City south to county line are two other roads. County is now building a boulevard 100 feet wide from Kansas City to Swope Park, six miles out. Bridges are of solid masonry or steel. Hills are cut down and hollows filled. County is spending \$275,000 a year in road building, anticipating in the near future a system of rock roads completely covering the county plat.

**CITIES AND TOWNS:**—Kansas City, population 163,752; Independence, county seat, population 6,974; Lee's Summit, 1,453; Blue Springs, 468; Oak Grove, 408; Buckner, 234; Greenwood, 230; Sheffield, Blue Springs.

**NEWSPAPERS:**—Kansas City Daily: Star, Times, Journal, World, Presse; Independence: Jackson Examiner, Sentinel, Judge, The Letter; Zion's Ensign; School News; Assembly News; Lee's Summit Journal; Oak Grove Banner; Buckner Tribune; Blue Springs Snl-a-Bar Voice; Sheffield Press.





**J**ASPER is Missouri's one hundred million dollar county. It is reliably estimated that its vast resources are beyond this valuation. The county borders Kansas, and is fifty miles north of Arkansas. It is the greatest zinc mining district in the world. The ore supply is practically unlimited. This mineral, worked since 1873, is found mainly in the south half of the county. Lead ore has been profitably mined since 1848 and was the means of the zinc discovery. At the center of the county is found boundless deposit of white limestone, dressed production from which is shipped all over the United States and is of large industrial importance to the county. In the southeast corner horticulture is a heavy asset. Here are extensive nurseries and this is the location of the largest strawberry acreage in Missouri. From one point, alone, three hundred and sixty car loads of berries are exported in ordinary seasons. The northern half of the county is devoted to agriculture and the feeding of live stock. Wheat is an important cereal and as a consequence this section is famous for flouring mills of large number and capacities. Jasper county has three cities with a combined population of 45,000. Joplin, largest city of southwest Missouri, has 26,023 inhabitants; Carthage, county seat, has 9,416, and Webb City, intervening, has 9,201. An electric line connects most towns of the south half of the county and there are 250 miles of gravel roads in splendid condition. County has a permanent public school fund of \$275,000. There are three high schools and Carthage Collegiate Institute doing work approved by the State University.

JASPER COUNTY'S 1902 CROP			
	ACRES	PRODUCT	VALUE
Corn	73,915	2,402,238 *	\$ 756,705
Wheat	82,975	1,618,015 *	999,910
Oats	17,009	510,270 *	135,220
Hay	14,581	21,795 †	163,465
Forage	3,640	4,855 †	24,275
Flax	2,894	11,576 *	12,040
Broom Corn	28	14,400 †	425
Clover Seed		320 *	1,790
Grass Seed		2,210 *	3,565
Tobacco	2	1,300 †	190
Potatoes	1,094	109,400 *	38,290
Vegetables	1,570		80,965
Total			\$2,106,800
LIVE STOCK AND PRODUCTS			
KIND	NUMBER	VALUE	
Cattle	23,750	\$ 615,125	
Horses	11,203	728,195	
Mules	2,947	157,290	
Asses and Jennets	88	3,420	
Sheep	3,179	9,535	
Swine	23,502	235,020	
Chickens	145,562		
Turkeys	2,483		
Geese	1,557	109,660	
Ducks	3,866		
Swarms of Bees	2,530	7,500	
Honey	194,323 †	11,790	
Wool	14,360 †	2,395	
Milk	3,633,146 †	380,970	
Butter	707,594 †		
Eggs	916,813 †	114,600	
Total		\$2,375,520	
* Bushels.	† Pounds.	Dozen.	
† Tons.	\$ Gallons.		

Photos in heading: Beckoning the Harvesters; Mining Scene, Webb City,

**TIMBER:**—One-fourth timbered. Confined to Spring river, Center creek and other less important streams. Consists of oak, elm, hickory, walnut, cottonwood, hazel brush. Timber now found is practically all second growth.

**MINERALS:**—Zinc, lead, limestone, clay, gravel, coal. One-fourth of the land is developed mineral land and is worth from \$100 to \$10,000 an acre. Another one-fourth is prospected sufficiently to determine mineral existence and may be bought at from

\$5 to \$100. Mineral indications cover nearly all the county. There are many exceedingly large mines of zinc and lead and hundreds of small mines. Operations are largely on leasing system, land owners receiving stated royalties upon outputs. Product is sold weekly at mines. Mineral is found in depths varying from surface to 275 feet. Fifty per cent of the zinc sold in recent years in the United States was produced in the Joplin district. Last year this district marketed about ten million dollars worth of product, seven million dollars worth coming from Jasper county.

**LAND:**—Aside from the piling of large mountains of gravel ore refuse upon comparatively small acreages, the mining does not detract from the agricultural value of the country. Much of the best mining is done upon some of the most productive land agriculturally. Jasper county is generally undulating of lay. It embraces 672 square miles, 430,080 acres, of which 270,236 acres are improved farm lands. There are 3,054 farms, average acreage, 112; aggregate valuation, \$15,977,893. Soil is red limestone clay characteristic of Ozark border. The best farms may be bought for \$50 to \$60 an acre, many at \$30 to \$40.

**FRUIT:**—Strawberries are grown in vast quantities and are of especially large size and splendid flavor. Apples thrive in this soil and climate.

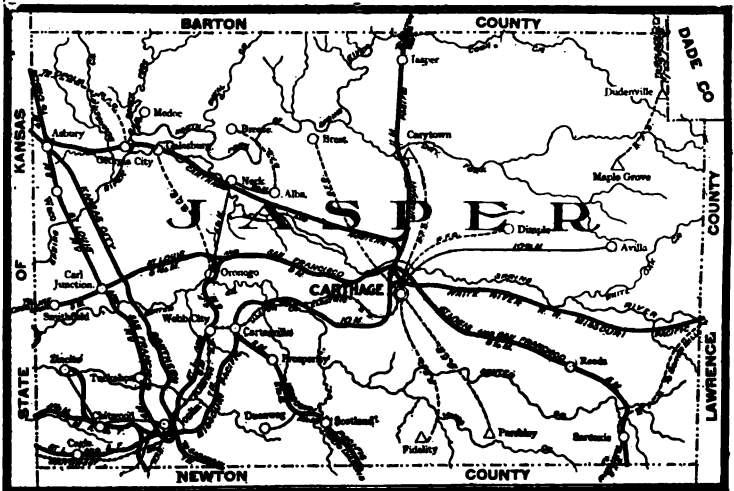
**MANUFACTORIES:**—In connection with mining and smelters, white lead works, zinc oxide works, paint factories, foundries and machine shops. Correlating with wheat growth are the large flouring mills. In addition are wagon and carriage works, ice plants, planing mills, brick works, broom factories, breweries, cornice works, woolen mills, clothing factory, fruit canneries, fruit evaporators, plow factory, lime kilns, pottery plants.

**TRANSPORTATION:**—Five great railroad systems. Electric line interurban. Mines furnish road material ready for gravel roads at no cost except hauling. Miles of gravel roads, 250.

**SCHOOLS:**—Permanent school fund. Joplin, Carthage, Webb City and Cartersville high schools. School districts, 121. Carthage Collegiate Institute and Webb City College. Several business colleges.

**TOWNS:**—Joplin, Carthage, Webb City, Cartersville, Sarcoxie, Jasper, Oranogo, Carl Junction, Alba, Neck City and Chitwood incorporated towns.

**NEWSPAPERS:**—Carthage: Democrat, Press; Joplin Globe, Times, News-Herald; Webb City Register, Sentinel; Cartersville Journal; Sarcoxie Record, Leader; Carl Junction World, Standard; Oranogo Index; Jasper News.



SARCOXIE NURSERIES.



**M**INING, manufacturing, dairying, horticulture and agriculture are all prominent in Jefferson county, just south of St. Louis. The largest plate glass manufacturing plant in the west is located at Crystal City. Extensive lead smelters are the life of Hercules. At Kimmswick is an immense lime plant. Ninety per cent of Jefferson county's surface is indicative of mineral deposit. Zinc, lead, baryta, silica, pottery clay, tile clay and building stone are the mineral products. Milk and butter are sent to St. Louis daily from all stations along the Iron Mountain railroad. Horticulture in this locality afford grapes, berries and other small fruits for St. Louis markets. There are 156,055 acres devoted to the raising of grain and vegetables. Jefferson county embraces 640 square miles of land, 409,600 acres, of which 2,596 farms include 132.6 each on the average. Farm lands are estimated to aggregate \$5,869,924, in accordance with present selling price. There are approximately one hundred miles of gravel roads in the county. At De Soto, the Iron Mountain railroad maintains machine shops and a division point office. A Railroad Young Men's Christian Association is prominently associated with railroad interests. The town is also the location of a school which educates young men for Catholic priesthood.

JEFFERSON COUNTY'S 1902 CROP			
	ACRES	PRODUCT	VALUE
Corn	89,739	1,510,682 *	\$ 566,270
Wheat	30,701	614,020 *	362,270
Oats	8,652	127,820 *	42,600
Hay	17,478	30,585 †	367,025
Forage	2,260	3,105 †	15,595
Broom Corn	7	3,500 *	3,900
Clover Seed		600 *	110
Grass Seed		50 *	640
Tobacco	9	6,390 †	89,280
Potatoes	1,860	186,000 *	55,730
Vegetables	845		
Total			\$1,502,855
LIVE STOCK AND PRODUCTS			
KIND	NUMBER	VALUE	
Cattle	20,880	\$ 522,000	
Horses	5,808	348,480	
Mules	2,545	178,150	
Asses and Jennets	51	4,590	
Sheep	4,636	13,908	
Swine	23,694	236,940	
Chickens	148,878	80,655	
Turkeys	1,919		
Geese	2,504		
Ducks	2,847	2,684	
Swarms of Bees	1,054		
Honey	35,133 †	4,392	
Wool	15,100 †	2,517	
Milk	3,302,440 †	311,285	
Butter	413,215 †	112,166	
Eggs	897,330 †		
Total		\$1,817,786	
* Bushels.	† Pounds.	Dozen.	
† Tons.	\$ Gallons.		

Photo in heading: City of DeSoto.

**MINERALS:**—Southwestern portion of county is covered with mines, from Franklin county to Ste. Genevieve county line. Lead and zinc are principal minerals. Leading mines are the Platin mines, Howe's, McCormick zinc mine, Frumet mines, and Valles mine, bordering St. Francois county. On the Mississippi river at Festus and Silica are the famous glass sand deposits. Cement rock is found near Kimmswick.

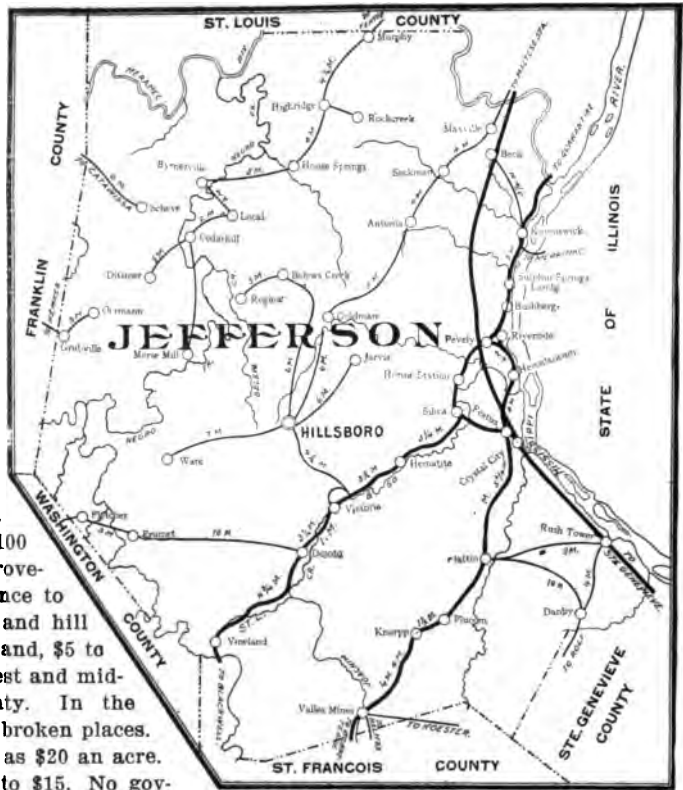
**LAND:**—Generally high, rolling, much of it broken. There are large fertile bottoms adjoining the streams. The best of bottom land sells at \$50 to \$100 an acre, dependent upon improvement and location with reference to towns. Medium land on flats and hill sides sell at \$10 to \$15; ridge land, \$5 to \$10. Best lands are in northwest and middle northwest parts of county. In the southeast section are the most broken places. Best of wild lands sell as high as \$20 an acre. Average wild land brings \$10 to \$15. No government land.

**MANUFACTORIES:**—Lime kilns, smelters, wine presses, creameries, glass works, hub factories, saw, flouring and planing mills, corn shredders, brick yards.

**MINERAL SPRINGS:**—Sulphur Springs and Kimmswick Springs are noted for their medicinal value. In addition to above, local health resorts are located at Big Bend on Big river and the Shut-In near Platin creek. Some of the most picturesque scenery in Missouri is along the Mississippi river bluffs which rise oftentimes to an extreme of two hundred feet above the river.

**Towns:**—De Soto, population 5,611, Iron Mountain division point and shop location; has marble works, planing mills, large flouring mills, hub factory, brick works, corn shredder. Festus, 1,256, brick factory, flouring mill, near by glass sand deposits. Hillsboro, county seat, 254. Crystal City, glass sand industry. Morse Mills, Cedar Hill, Byrnesville, House Springs, and Hematite.

**NEWSPAPERS:**—Hillsboro Jefferson Democrat; DeSoto Press, DeSoto Republican; Festus News.



HEMATITE SMELTERS.



**J**OHNSON is one of the great multi-interest counties of Missouri. State Normal School for the Second District of Missouri annually enrolls one thousand students at Warrensburg, county seat city; Pertle Springs is famous as a convention city and summer resort; white and grey sandstone quarries are of justly high repute; and second only to schools is the influence of the ascending-rich agriculture acreage, basis for home and school and church and State. Lafayette county is on the north, lying between the Missouri river and Johnson, which is also second east of the Kansas-Missouri boundary. Coal mines operate mainly at Bristle Ridge, five miles south of Montserrat. Corn is the leading product in value, amounting to more than two million dollars annually. Cattle represent a total value to feeders of one and one-third millions;

horses and mules a little in advance of cattle. Dairying in small, individual way is becoming popular among farmers. Gravel road mileage is rapidly increasing to the appreciable aid of modern farm methods. County area, 800 square miles, or 412,000 acres, of which 411,544 acres are improved farms. Number of farms 3,869, in average size 126.2 acres including cultivated, pasture, timber and character of land. Estimated aggregate value \$15,074,166.

**POPULATION:**—White, 26,128; colored, 1,715; American born, 27,232; foreign born, 611; total, 27,843. Farm homes owned, 2,409; rented, 1,375; other homes owned, 1,353; rented, 998; total families, 6,135.

**FINANCE:**—County tax: revenue 30 cents; road, 20 cents; courthouse, to be satisfied this year, 10 cents on one hundred dollars; school tax 3 cents to \$1.10, average, 40 cents; total assessed valuation \$11,158,779; assessed valuation per cent of actual valuation 40; no county debt; township debt, \$65,000.

**TIMBER:**—Forty per cent, along streams, originally; one-half cleared. Consisted of black oak, white oak, walnut, hickory and ash. Portable mills operate for local needs. Native hardwood lumber \$20 a thousand feet.

**MINERALS:**—Coal, building stone and clay abundant. Coal mines at Knobnoster, Montserrat, Warrensburg and Holden; total annual output 8,500 tons.

JOHNSON COUNTY'S 1902 CROP			
	ACRES	PRODUCT	VALUE
Corn	136,640	6,422,080 *	\$2,022,955
Wheat	52,746	1,285,905 *	687,675
Oats	7,519	225,570 *	59,775
Hay	49,231	83,695 †	544,020
Forage	5,740	7,655 †	38,275
Flax	8,902	35,608 *	37,080
Broom Corn	137	75,350 †	2,070
Clover Seed		3,890 *	22,290
Grass Seed		3,300 *	5,280
Tobacco	25	16,250 †	1,625
Potatoes	1,084	151,760 *	53,115
Vegetables	1,240		63,075
Total			\$ 3,517,185
LIVE STOCK AND PRODUCTS			
KIND	NUMBER	VALUE	
Cattle	21,459	\$1,347,420	
Horses	15,341	1,022,735	
Mules	4,648	348,600	
Asses and Jennets	206	20,600	
Sheep	11,079	38,235	
Swine	65,956	669,560	
Chickens	223,617		
Turkeys	9,690	204,890	
Geese	4,533		
Ducks	2,282		
Swarms of Bees	2,842	6,365	
Honey	94,733 †	11,840	
Wool	48,150 †	7,190	
Milk	3,364,750 †	214,990	
Butter	590,668 †		
Eggs	1,268,320 †	114,600	
Total		\$3,991,965	
* Bushels.	† Pounds.	‡ Dozen.	
† Tons.	\$ Gallons.		

Photos in heading: Scene in Pertle Springs Park; Johnson County Courthouse; Missouri Pacific Depot, Warrensburg,

White and grey sandstone quarried from two deposits at Warrensburg. Saws are operated; stone finds market in Missouri and contiguous states. State Normal School and Johnson county courthouse at Warrensburg are monuments to its beauty and value. Stone is found 90 feet thick. Clays claimed to be fireproof are extensively deposited near Montserrat.

**LAND:**—Four-fifths of county is uniformly a rolling prairie, broken only by timber fringed creeks.

One-fifth defines a rough ridge extending from Montserrat southwesterly to the Missouri, Kansas & Texas railroad and another broken, precipitous strip near Pittsville. Seemingly in a chain northwest to southeast, a series of hills, sloping gradually upon all sides, take position in this section of Missouri. They are never closer than one mile, frequently ten miles apart and rise three hundred feet above valleys adjacent. They are called knobs, hence the name Knobnoster, applied to a leading town. Land prices are \$30 to \$40 the county over. By actual record of land sold in 1903, average price was \$36.22 an acre, an increase of \$9.35 an acre over the year preceding. Average price of town lots \$391. Two per cent of county, near Centerview brings \$65 to \$75. Soil of county produces corn, wheat, oats, potatoes, timothy, blue grass, clover. It is limestone loam, black, averaging in depth two feet, over clay. In rough regions land sells at \$10 to \$20.

**MANUFACTURED PRODUCTS:**—Brick, flour, overalls, broom racks and finished stone.

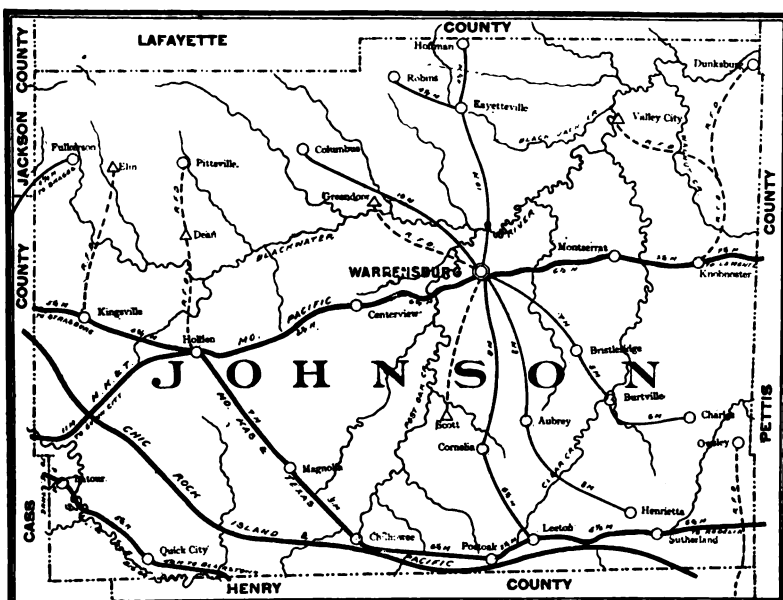
**TRANSPORTATION:**—Missouri Pacific railroad, Kansas City to St. Louis, 37.01; Frisco, 10.39; Missouri, Kansas & Texas, 39.68; Rock Island, 37; Pertle Springs branch, 2.25 miles taxed road.

**SCHOOLS:**—State Normal School, main building erected 1871; courses in Kindergarten, Primary, Teaching, History, Physics, Chemistry, Biology, Agriculture, Manual Training, Drawing, Latin, Greek, French, German, Physical Culture, Music, Mathematics, Psychology and School Management. Enrollment: normal school term, 781; summer school, 487; total, 1,268. Last Legislature appropriated \$50,000 for modern gymnasium. Science building erected 1895 cost \$30,000. Holden, location of Catholic College for girls. Commercial College at Warrensburg.

**TOWNS:**—Warrensburg, school town, county seat, farming. Stone quarries; \$50,000 waterworks system; \$50,000 courthouse; \$45,000 electric plant; \$10,000 stone depot; three large flouring mills are points of pride. Pertle Springs is mile and one-half away; Holden, second town commercially, supported by agricultural interests. Has creamery, flour mill, waterworks, electric lights; Knobnoster, coal mining, farming; Centerview, Chilhowee, Leeton, all centers of fine farming districts.

**NEWSPAPERS:**—Warrensburg Journal-Democrat, Standard Herald, Star; Holden Enterprise; Knobnoster Gem; Centerview Record; Chilhowee News; Leeton Times.

Mo. — 27



HOTEL, PERTLE SPRINGS.





**K**NOX is in northeast Missouri. It lies thirty-five miles south of Iowa, and is the second county west of the Mississippi river. Farming and live stock raising are the chief industrial activities. Cattle values and corn products aggregate more than two million dollars. Horses and mules amount to the extent of a million dollars; hogs are worth half a million, and timothy and blue grass aggregate a total worth the same. County contains 510 square miles, or 326,400 acres, of which 252,685 acres are cultivated. There are 2,133 farms including 145 acres on an average. Actual value of farm lands, \$6,677,124.

**POPULATION:**—White, 13,303; colored, 176; native born, 13,033; foreign born, 446; total, 13,479. Farm homes owned, 1,618; rented, 444; other homes owned, 539; rented, 326; total families, 2,927.

**FINANCE:**—County tax, 45 cents; school tax, 20 cents to \$1.15; average, 43½ cents; total assessed valuation, \$4,487,891; assessed valuation upon forty per cent basis; no county debt; no township debt.

**THE LAND:**—Fabius river flows diagonally through the county from northwest to southeast. It is a many-forked stream, and has a large number of small tributaries. Along these and Salt river, in the southwest corner, originally grew large trees of black oak, hickory, walnut, ash, linwood, maple, white oak and cottonwood. Forty per cent of the county was thus timbered. Three-fourths of the trees have been removed. Portable saw mills make hardwood lumber enough for local demands. Walnut logs are yet a commercial asset, being shipped from Edina, Knox City, Hurdland, and Baring. Bottom lands adjoining the streams are generous of width, and soil is sandy, black loam. All lands set naturally in blue grass. Farms along streams, embracing both hill and bottom land, range in price from \$20 to \$40, according to improvement, and further depending upon whether little or much bottom land be included. Overflows are more frequent than along the Mississippi or Missouri rivers, but never are they seriously injurious. Long sloping hills, rarely reaching three hundred feet above the bottoms, often

KNOX COUNTY'S 1902 CROP			
	ACRES	PRODUCT	VALUE
Corn	77,360	3,326,480 *	\$1,014,575
Wheat	788	16,550 *	9,990
Oats	7,043	200,725 *	50,180
Hay	52,870	89,090 †	445,150
Forage	6,090	7,105 †	35,525
Flax	7	50 *	50
Broom Corn	42	21,000 †	590
Clover Seed		15 *	100
Grass Seed		14,850 *	20,790
Tobacco	18	17,100 †	1,510
Potatoes	640	79,750 *	19,940
Vegetables	805		36,785
Total			\$1,634,145
LIVE STOCK AND PRODUCTS			
KIND	NUMBER	VALUE	
Cattle	34,143	\$1,109,645	
Horses	11,152	743,465	
Mules	2,203	165,225	
Asses and Jennets	49	4,900	
Sheep	14,688	44,065	
Swine	48,961	489,610	
Chickens	147,006		
Turkeys	2,559	121,920	
Geese	4,159		
Ducks	1,980		
Swarms of Bees	3,614	5,695	
Honey	87,183 †	10,890	
Wool	48,000 †	8,000	
Milk	1,700,496 ‡	110,790	
Butter	294,780 †		
Eggs	829,940 †	108,740	
Total		\$2,917,945	
* Bushels.	† Pounds.	‡ Dozen.	
† Tons.	§ Gallons.		

Photos in heading: Farm scenes, Fred B. Parsons.

bound the latter. Highest of these is at Edina, back from South Fork of Fabius river. Between streams are paralleling tracts of undulating prairie, valued at \$30 to \$50 an acre. Soil is black vegetable mould, to a depth of three and one-half feet, over clay. Farm improvements are best in south central and west central portions of Knox county. Farm homes costing \$2,500 to \$3,500 are found. There are thirty or thirty-five Knox county farms which contain a thousand acres each.

**WAGON FACTORIES:**—At Edina are two, one making "Miller" wagons, the other the "Scofield." The former makes 1,000 a year. Two grist mills, a cigar and tobacco factory, two saw mills, sash and planing mill, cold storage for poultry, grain elevator and a nursery, which ships stock into adjoining States, are additional manufactories of importance.

**TRANSPORTATION:**—Miles of taxable railroad: Atchison, Topeka & Santa Fe, 17.75; Quincy, Omaha & Kansas City, 22.06. Railroads permit feeding cattle bought in Kansas City to be billed to Chicago; unloaded and fattened in Knox county, and reloaded for Chicago at the regular Kansas City-Chicago through rate. Dirt roads are successfully dragged.

**SCHOOLS:**—County school system is headed with Edina High School, diploma from which admits without examination to University of Missouri. St. Joseph's College (Catholic), at Edina has one hundred students enrolled, with convent home for young women in connection. Oaklawn College, at Hurdland, established 1876, has one hundred students. Literary and music courses are provided by both institutions. Edina School of Music enrolls forty pupils in piano, organ, violin, mandolin, voice, French, elocution, and dramatic art.

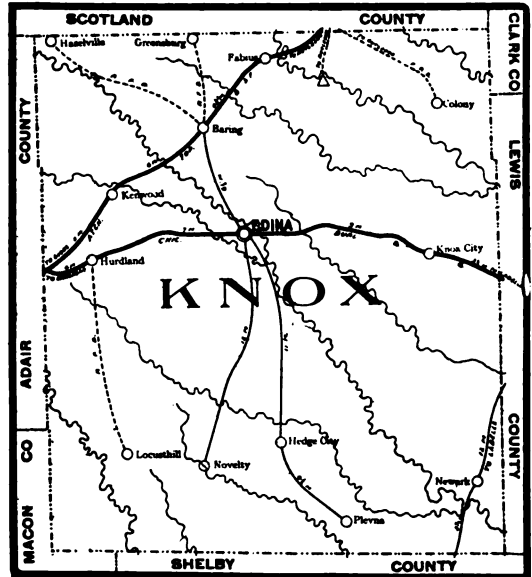
**SPRINGS:**—Forest Springs are of mineral value; undeveloped. There are many small springs throughout the county. Stock is watered by these, by wells ranging in depth from twenty to thirty feet, and by ponds. The latter are giving way to windmill wells, in pace with modern farming.

**TOWNS:**—Edina, county seat, largest town. Built around beautiful park; has electric lights, waterworks, telephone connection with every corner of the county; Hurdland, Knox City, Newark, Novelty, Locusthill, Colony, Kenwood, Baring are village farming centers.

**LIVE STOCK:**—Perhaps no county in the State surpasses Knox in matter of high bred cattle, horses and hogs. Percentage of low bred live stock is remarkably small, resulting from a movement some years ago to establish pure bred stocks. Horse sale at Edina first Saturday in each month, is often attended by buyers from all over north Missouri and southern Iowa.

**ORCHARDS:**—Near Hurdland is an 80-acre orchard, and others of less size. All fruits not tropical are grown. Apples, pears, peaches, apricots, and berries of all varieties excel.

**PUBLICATIONS:**—Edina Democrat, Register, Sentinel; Hurdland Times.



FARM SCENE, KNOX COUNTY.



**L**ACLEDE is in the "Land of the Big Red Apple." Its 740 square miles of land surface are located in the central part of south Missouri, two hundred miles southwest of St. Louis, and chiefly upon a plateau of the Ozark mountains. Apples are its chief product. Many orchards number into hundreds of acres; the Frisco Orchard Company has been engaged for more than a year in putting out what will be the largest apple orchard in the world. It is to be five thousand acres, located northeast of Lebanon, upon the St. Louis & San Francisco railroad. In the county are 473,600 acres, of which 131,942 are cultivated. Farms number 2,614, including plow, orchard, and pasture land, 110.9 acres in average, aggregating a present market value of \$2,984,504. Besides apples, peaches, apricots, pears and berries, cattle, horses and mules, hogs and corn are exported.

**POPULATION:**—White, 16,159; colored, 364; American born, 16,147; foreign born, 376; total, 16,523. Farm homes owned, 1,878; rented, 753; other homes owned, 396; rented, 311; total, 3,338.

**TIMBER:**—Originally all, except approximately 15,000 acres. Consisting of the various oaks, hickory, ash, cherry, cedar, and in the river and creek bottoms, maple, black walnut, sycamore, mulberry, and elm. The bottom land timber was large growth, but the plateau land more frequently grows the scrub variety. Even the 15,000 acres of prairie, scattered in small tracts throughout the southern half, have at some time or other supported a scrub oak growth.

Iron, lead, zinc, kaolin, and limestone deposits are believed to exist, though mining has never been followed in Laclede county.

**LAND:**—Located upon the top levels of the Ozark mountains, the general elevation is approximately one thousand feet above the Mississippi river at St. Louis. The county includes some fine lying land, both in river bottoms and on plateau. There is, also, some rough land, fit for pasture or orchard. The roughest is along the Niangua, the Grand Auglaise, Osage Fork of Gasconade, and the Gasconade rivers, bold, precipitous mountain bluffs bordering the river on one side and river bottoms on the opposite side. Lebanon, the county seat, is located upon a small body of land nearly level. Its

LACLEDE COUNTY'S 1902 CROP			
	ACRES	PRODUCT	VALUE
Corn	40,567	1,237,577 *	\$ 370,985
Wheat	18,217	800,545 *	165,320
Oats	4,830	144,900 *	38,400
Hay	21,969	80,755 †	153,775
Forage	2,140	2,675 †	18,375
Flax	8	18 †	20
Broom Corn	11	5,800 †	150
Clover Seed		560 †	8,135
Grass Seed		185 †	335
Tobacco	30	21,000 †	1,445
Potatoes	657	65,700 *	21,025
Vegetables	460		23,120
Total			\$ 791,635
LIVE STOCK AND PRODUCTS			
KIND	NUMBER	VALUE	
Cattle	17,273	\$ 431,825	
Horses	6,669	400,140	
Mules	1,703	110,686	
Asses and Jennets	80	7,200	
Sheep	10,889	31,170	
Swine	25,274	252,740	
Chickens	75,879		
Turkeys	2,681		
Geese	2,669	69,090	
Ducks	1,562		
Swarms of Bees	868	1,925	
Honey	29,333 †	3,615	
Wool	30,700 †	5,135	
Milk	1,870,784 †	136,625	
Butter	294,521 †		
Eggs	459,240 †	57,405	
Total		\$1,507,565	
* Bushels. † Pounds. † Dozen.			
† Tons. \$ Gallons.			

Photo in heading: Fruit farm of E. R. Clough, Lebanon.

location is one of the frequent plateaus which are rapidly being transformed into apple orchards. Orchards beginning to bear are worth \$150 to \$200 per acre, which is about \$3 a tree. One-third of the improved lands outside of orchards, can be bought at \$10; another one-third at \$15 to \$20; one-fourth at \$25; remaining one-twelfth at \$30 to \$40. A half dozen farms adjoining Lebanon are held at \$50 to \$60. Seven-twelfths of the county is wild land, free live stock bluestem range, which can be bought at \$2.50 to \$10. One-half of this is owned by speculators and non-residents. Upland soil is a light colored clay over gravelly red clay. Bottom land soil is brown clay alluvial. Soil and climate are the chief elements which make the section one of fruit. Laclede county, at the Paris Exposition, was awarded first prize for "The best display of Apples in the World."

Flour is the only manufactured product.

**TRANSPORTATION:**—Frisco main line, St. Louis to Springfield, is taxed upon 36.35 miles of roadbed. Gasconade, Niangua and Osage Fork of Gasconade are of great value in transportation of railroad ties and logs.

Lebanon High School conforms to four years' study, meeting requirements of University of Missouri.

Living water is had at depths from 35 to 60 feet. Springs are of a frequency general to mountainous localities.

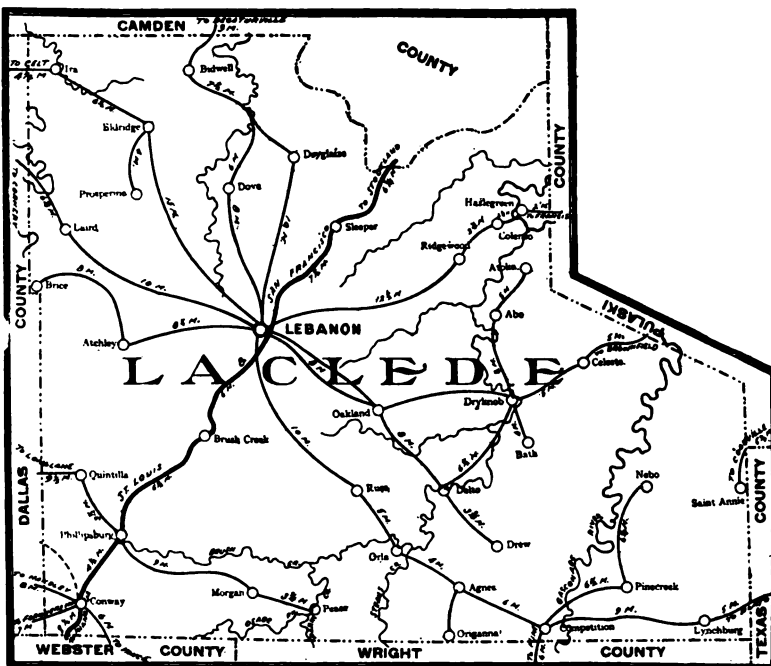
**MINERAL SPRINGS:**—At Lebanon is a well one thousand feet deep. The water is said to contain magnesium properties. It is without price. Among the remarkable formations of nature are a saltpetre cave and a natural bridge seven miles west of Lebanon.

**FISHING AND HUNTING:**—The rivers offer all kinds of game fish, including bass, jacksalmon, crapple, perch, redhorse, buffalo and catfish. There are a few deer; wild turkeys are plentiful, and squirrels, quail, rabbits and foxes are abundant.

**TOWNS:**—Lebanon, county seat, is the only town larger than the village. It is a fourth-class city, known as the home of the late Richard Parks Bland. A bronze monument to Congressman Bland stands in the court house yard. Lebanon is 56 miles northeast of Springfield, on the Frisco railroad. It has electric lights, waterworks, two flouring mills, and eight churches, including both Protestant and Catholic.

**FINANCE:**—County tax, 51 cents; school tax, average 57 cents; total assessed valuation, \$3,183,011; assessed valuation per cent of actual valuation 65; county debt, \$55,000; no township debt.

**NEWSPAPERS:**—Lebanon Republican, Sentinel, Rustic; Conway Record.



A LAND OF APPLE ORCHARDS.



**I**N CITIZENSHIP; in agriculture; in schools; in coal, Lafayette is one of Missouri's first counties. It has always figured prominently in the history of the State; in agriculture it has been fertile; it is the seat of several leading institutions of learning; its coal output employs two thousand men and brings in a million dollars a year. Lafayette county is located upon the south bank of the Missouri river, thirty miles east of Kansas City. It contains 622 square miles, 398,080 acres, 326,718 acres of which are under cultivation. There are 3,043 farms averaging 120.8 acres each, worth actually \$16,-071,645. Corn, cattle, horses and mules, hay and wheat afford large agricultural income. In bee raising the county has a distinction. Confederate Home of Missouri is located at Higginsville.

**POPULATION:**—Families long established. Population one-fifth German and German descent, located at Concordia and Napoleon; some at Wellington and Higginsville. White, 28,002; colored, 3,677; American born, 29,337; foreign born, 2,342; total, 31,679. Farm homes owned, 3,879; rented, 1,007; other homes owned, 1,733; rented, 1,672; total families, 8,291.

**FINANCE:**—County tax, 75 cents on one hundred dollars; school tax from 10 cents to \$1.20; average, 40 cents; assessed valuation per cent of real valuation, 40; assessed valuation, \$11,628,755; county debt, \$535,000; township debt, \$255,700.

**TIMBER:**—Timber primevally embraced a two-mile strip along the Missouri river and less wide strips along other streams—total area, 33 per cent. Species were black oak, burr oak, hackberry, walnut, hard and soft maples, locust, white oak, catalpa, red elm, white elm, coffee bean, box elder, alder, and hickory. Growth was large and heavy; 75 per cent cleared. Few portable mills.

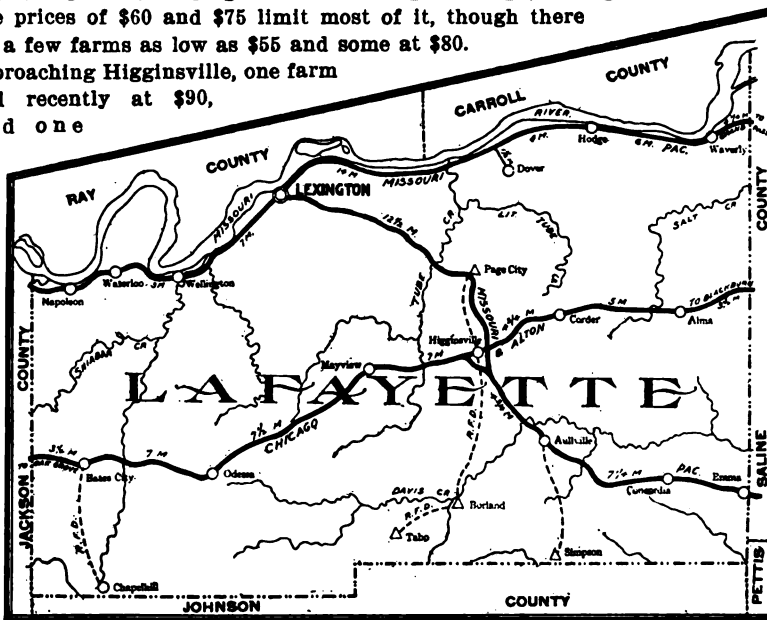
**COAL:**—Annual output, 539,612 tons, second largest coal county in Missouri. Mines have been operated sixty years. Vein is eighteen inches to two feet in thickness, forty-five to one hundred and twenty feet from surface. Mines operated at Alma, Bates City, Concordia, Corder, Higginsville, Lexington, Mayview, Odessa, Waterloo, Waverly and Wellington. Operating mines, 54. At Waverly vein is four feet thick. Limestone is taken from bluffs for local consumption; not considered commercially important.

**LAND:**—Approximately fifteen sections of rich, black, sandy, alluvial lands along Missouri river, priced at \$50 to \$60. Subject to overflow, averaging once in seven years. Adjoining these are limestone bluffs, precipitous, rising two hundred feet on the river side but sloping gradually into prairie level upon the south. Soil is limestone, black, fertile. Improvements splendid. Finest farm house in Missouri is located here, at a cost of \$50,000, two miles southeast of Lexington.

LAFAYETTE COUNTY'S 1902 CROP			
	ACRES	PRODUCT	VALUE
Corn	194,308	5,372,320 *	\$1,602,280
Wheat	48,918	1,233,700 *	709,630
Oats	11,202	325,148 †	84,540
Hay	32,111	56,195 †	365,270
Forage	2,980	3,945 †	19,725
Flax	86	860 †	695
Broom Corn	29	15,950 †	440
Clover Seed		2,250 *	12,375
Grass Seed		260 *	405
Tobacco	15	13,500 †	1,350
Potatoes	1,256	175,840 †	42,300
Vegetables	1,810		76,320
Total			\$2,999,130
LIVE STOCK AND PRODUCTS			
KIND	NUMBER	VALUE	
Cattle	38,746	\$1,259,245	
Horses	12,981	865,400	
Mules	5,169	387,675	
Asses and Jennets	97	97,700	
Sheep	8,465	28,215	
Swine	77,801	778,010	
Chickens	248,429		
Turkeys	7,972	188,625	
Geese	4,747		
Ducks	8,812		
Swarms of Bees	2,903	7,125	
Honey	96,933 †	12,115	
Wool	82,450 †	5,410	
Milk	4,126,846 †	275,275	
Butter	591,406 †		
Eggs	1,476,270 †	184,535	
Total		\$4,001,330	
* Bushels.	† Pounds.	Dozen.	
† Tons.	\$ Gallons.		

Photos in heading: Enjoying the Bath; Artillery Drill, Wentworth Military Academy.

Prices are \$60 to \$75 an acre. Balance of the county excepting two rough ridges, is prairie, ranging from undulating to a high, rolling surface. The prices of \$60 and \$75 limit most of it, though there are a few farms as low as \$55 and some at \$80. Approaching Higginsville, one farm sold recently at \$90, and one



farm near Lexington brought \$105 an acre. Ridges which are located at Chapel Hill and Greenton are rocky and rough. Comparatively this land area is small. Farms are found at \$20 to \$30. One-third of the average farm in this section is too rough for advantageous cultivation. In majority of cases rock is sixty feet from surface. No surface rock. Top soil is loamy, one to four feet deep; in the bottoms endless. The representative farm is well stocked; farming done with modern machinery; land worth \$65 an acre; two-story, six room house, large substantial barns, well-kept fencing, five-acre orchard.

**FURNITURE AND OTHER FACTORY PRODUCTS:**—Furniture, flour, pressed brick, beer, tile, and cigars are made. There are four canning factories, and four creameries.

**TRANSPORTATION:**—Chicago & Alton, 36.70; Missouri Pacific, 42.83; same, Marshall & Boonville branch, 25.55; Higginsville Switch Co., 3.62 miles roadbed. Miles of telephone, 158.20.

**SCHOOLS:**—Six high schools in six leading towns. Wentworth Military Academy, established 23 years; military instructor supplied by United States government; 125 students; twelve instructors; for boys. Central Female College; Methodist Episcopal church, South; 135 students; endowed; eighteen officers and teachers; organized 1869. Lexington College for Young Women; Baptist church; 115 pupils; established 1855. At Concordia: St. Paul's College; German Lutheran church, 120 pupils; 90 boarding pupils. Odessa College, of Odessa; co-educational, non-sectarian.

**NEWSPAPERS:**—Lexington Intelligencer, News; Odessa Ledger, Democrat; Higginsville Thalbotte, Leader, Jeffersonian; Concordia Concordian; Waverly Watchman.



\$50,000 FARM RESIDENCE, LAFAYETTE COUNTY.



## LAWRENCE

**M**INER, farmer and tradesman direct the commerce of Lawrence county. Two of its first cities are devoted to mining lead and zinc. The farmer raises wheat, strawberries and small fruits as specialties, in addition to the more staple crops of corn, hay and vegetables, and horses and cattle. Railroad interests are foremost at one point. Another town, besides being center to splendid horticultural and agricultural area, is the seat of a college. With reference to conditions relating higher, Lawrence county is especially noted for its Sunday Schools. First Sunday School south of Missouri river was here founded. County is now under complete organization, including 5,980 homes enrolled in the work. It is situated 270 miles southwest of St. Louis and 185 miles miles south of Kansas City. It embraces 606 square miles, equal to 387,840 acres, of which 264,343 acres are in cultivation. There are 3,414 farms, averaging 103.1 acres. Total actual valuation is \$7,448,660.

**POPULATION:**—White, 31,379; colored, 283; American born, 30,586; foreign born, 1,076; total, 31,662. Farm homes owned, 2,261; rented, 1,085; other homes owned, 1,887; rented, 1,397; total families, 6,630.

**FINANCE:**—County tax, 30 cents on one hundred dollars; school tax from 40 cents to \$1.30; total assessed valuation, \$6,537,917; estimated one-third actual valuation; county debt, \$33,000; township debt, \$42,000.

**TIMBER:**—Black oak, white oak, post oak, and black-jack are leading varieties, covering in small second growth, one-third of county. The first amounts to one-half. Local demand for mining timbers has consumed the first growth timber. Hickory and walnut occur along streams.

**MINERALS:**—One of the important mineral counties of Missouri. Lead and zinc and silicates are mined. Southern half of the county is indicative of mineral deposit; one-seventh is developed. Districts center at Aurora and Stotts City. Outputs average approximately as follows: zinc, 11,959 tons; silicates, 2,364 tons; lead, 460 tons annually. Fine limestone, sandstone and fire clay are found.

**LAND:**—Everywhere the county is suitable for farming. Best mines underlie good agricultural lands. Uplands are fertile, dark-colored clay loam, with gravel mixed in, red clay beneath. In central eastern portion and in a few other places where there are hills, stony land is found, but never too rough for cultivation. Bottoms are sandy loam, rich in vegetable matter and very fertile. South half of county is table land, gently rolling.

LAWRENCE COUNTY'S 1902 CROP			
	ACRES	PRODUCT	VALUE
Corn	59,709	2,089,815 *	\$ 658,390
Wheat	100,320	1,908,080 *	1,048,345
Oats	15,758	512,135 *	135,715
Hay	11,687	18,695 †	121,520
Forage	1,375	1,835 †	9,175
Flax	1,008	4,021 *	4,185
Broom Corn	8	4,400 †	120
Clover Seed		845 *	4,730
Grass Seed		725 *	1,160
Tobacco	80	19,500 †	1,950
Potatoes	950	119,875 *	41,955
Vegetables	1,510		66,395
<b>Total</b>			<b>\$2,093,540</b>
LIVE STOCK AND PRODUCTS			
KIND	NUMBR	VALUE	
Cattle	19,088	\$ 572,580	
Horses	9,521	619,080	
Mules	3,391	237,870	
Asses and Jennets	72	5,200	
Sheep	4,081	12,245	
Swine	26,076	260,760	
Chickens	191,081		
Turkeys	5,469	115,780	
Geese	2,584		
Ducks	4,164		
Swarms of Bees	3,285	5,390	
Honey	7,167 †	9,520	
Wool	14,540 †	2,425	
Milk	2,883,353 †	168,245	
Butter	584,349 †		
Eggs	592,760 †	111,545	
<b>Total</b>		<b>\$2,122,100</b>	
* Bushels.	† Pounds.	Dozen.	
† Tons.	\$ Gallons.		

Photos in heading: Lawrence County Courthouse, Mt. Vernon; Pierce City Street Scene; Congregational Church, Pierce City.

Northern part is prairie; and in the west approaching hilly. Pennsboro prairie upon the east side of Frisco railroad is productively unsurpassed. Best bottom lands are selling at \$25 to \$35 an acre; best prairie and table lands at \$25 to \$40. Good farming and fruit growing lands are plentiful at \$15 to \$25 an acre. Ridge lands, under improvement, are variously valued at \$10 to \$15 an acre.

**FRUIT AND FRUIT LANDS:**—All uplands are adapted to fruit raising. Climate, soil and surface are favorable to fruit. Subsoil is porous. Strawberries are largely grown in vicinities of Logan and Marionville. In the latter vicinity are 5,000 acres of commercial apple and peach orchards. An average shipment of apples is 24,078 barrels annually, and thirty-one thousand crates of strawberries for the year. There are several small nurseries.

**MANUFACTORIES:**—Flouring mills, planing mills, canning factories, saw mills, carding mill, distillery, creamery, brick plants, iron foundry, wagon factories, felloe factory, lime works.

**TRANSPORTATION:**—Main line and branch of Frisco, and White River Branch of Missouri Pacific give direct connection with St. Louis and Kansas City. There are twenty miles of fine gravel roads in the county.

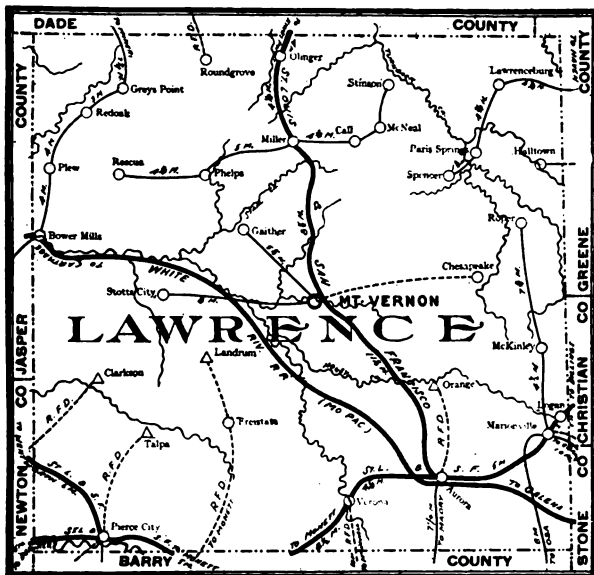
**SPRINGS:**—Paris Springs, on Sac river, in northwest corner of county, and Spring River Head, near Marionville and Verona, are small local camping places. Water of former is claimed to be of mineral properties.

**TOWNS:**—Aurora, mining town, population, 6,191; gravelled streets, electric lights and gas, waterworks. Pierce City, railroad town, 2,151; Marionville, 1,290, fruit center; Mt. Vernon, county seat, 1,206; Stotts City, mining, population 902; Miller, Verona, Bowres Mills, Friestatt, Lawrenceburg, Chesapeake, Paris Springs and Logan.

**SCHOOLS:**—Aurora and Pierce City have school system headed by high schools, whose diplomas admit without examination to University of Missouri. One hundred school districts, each supplied with proper facilities. Marionville Collegiate Institute and an Industrial School for Boys are further educational institutions at Marionville.

**LAWRENCE COUNTY SUNDAY SCHOOL ASSOCIATION:**—Organized 1870, holds annual conventions; embraces 100 schools; 940 officers and teachers; 7,920 scholars (children of school age in county, 8,860); two whole municipal townships with every home, and sixty school districts with every member of each family connected. The famous Lawrence County Map shows every home in the county and its relation to the work.

**NEWSPAPERS:**—Mt. Vernon Fountain and Journal, Record, Chieftain; Pierce City, Journal, Democrat; Aurora Advertiser-Herald, Argus; Stotts City Sunbeam; Marionville Free Press.



APPLE PACKING, MARIONVILLE, LAWRENCE COUNTY.





**G**ENERAL agriculture and pearl button manufacturing support Lewis county. Corn and wheat are raised; cucumbers are grown and pickled in immense quantities; tomatoes and other vegetables are preserved. Canton and LaGrange, located upon the Mississippi river, are important steamboat shipping points. They are also location of as many colleges. Western Lewis county is devoted to cattle and horse raising. County contains 510 square miles surface, 326,400 acres, of which 235,437 acres are improved farms. These number 2,277, averaging 136 acres in cultivated, pasture, timber and waste lands. Farm properties are estimated at \$6,987,420 actual value.

**POPULATION:**—White, 15,680; colored, 1,044; American born, 16,210; foreign born, 514; total, 16,724. Farm homes owned, 1,600; rented, 617; other homes owned, 891; rented, 657; total families, 3,765.

**FINANCE:**—County tax, 45 cents; school tax, from 16 cents to \$1.05; average, 60 cents; total assessed valuation, \$5,330,646; 40 per cent of actual valuation; no county debt; township debt, \$30,000.

**TIMBER:**—Originally covered eastern one-third and land elsewhere adjacent streams, total amounting to one-half surface; consisted of oak, hickory, sugar tree, walnut, ash, maple, two-thirds of which have been cleared. Most people burn coal, which saves wood supply. Half a dozen portable saw mills dot county. Sawed posts sell at 15 cents; cordwood, \$3 to \$4.

**LAND:**—One-half the county area is prairie land, covering western one-third and ridges alternating with streams running northwest to southeast in whatever other portions of county found. One-third of county is hill land and shading into bluff land; the balance is bottom land, the Mississippi bottom growing to three miles in width north of Canton, and likewise widening as one goes south from LaGrange. Extreme width of latter is nine miles. Prairie land averages \$40 per acre; from \$25 to \$40, with an occasional well improved farm at \$65. Best hill land averages the same; from \$20 up to \$100 within a mile of Canton and LaGrange. First bottom land brings \$20 to \$50; second bottom, which is higher elevation, \$50 to \$100, quantity of first being in excess of second. North Fabius, Middle Fabius and Wyaconda rivers have narrow bottoms. Probably 5,000 acres of bluff land along Mississippi, which can be bought at \$10 an acre. One-half of all the land in county may be had at \$30.

**MANUFACTURES:**—At Canton are four button factories, which make their product from mussel shells taken from the Mississippi river. Four hundred men are employed in pearl button manufacture and in the

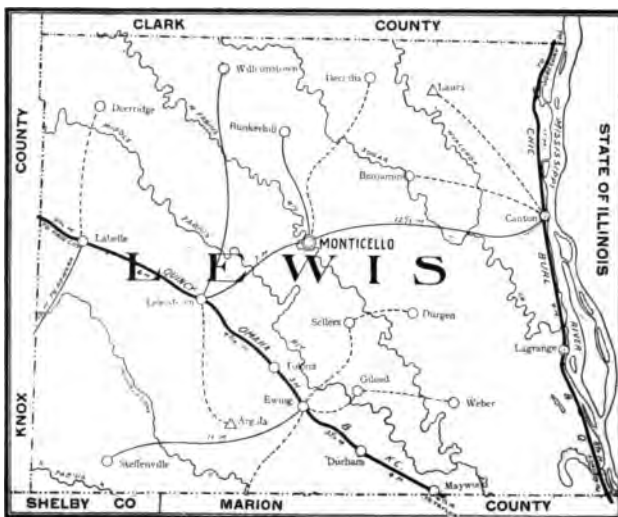
LEWIS COUNTY'S 1902 CROP			
	ACRES	PRODUCT	VALUE
Corn	66,750	2,608,250 *	\$ 703,990
Wheat	6,890	160,540 *	96,325
Oats	7,753	294,615 *	73,655
Hay	43,980	85,965 †	362,810
Forage	4,310	4,910 †	24,550
Broom Corn	6	3,000 †	85
Clover Seed		200 †	1,320
Grass Seed		2,950 †	3,290
Tobacco	18	17,100 †	1,540
Potatoes	565	67,560 *	16,890
Vegetables	985		20,460
Total			\$1,394,915
LIVE STOCK AND PRODUCTS			
KIND	NUMBER		VALUE
Catt'le	28,483		\$ 925,697
Horses	9,661		645,400
Mules	1,870		140,250
Asses and Jennets	57		5,700
Sheep	16,093		48,250
Swine	37,821		378,210
Chickens	130,444		
Turkeys	4,562		137,680
Geese	2,45		
Ducks	1,125		
Swarms of Bees	2,130		4,430
Honey	71,000 †		8,875
Wool	58,200 †		9,700
Milk	2,034,886 †		126,365
Butter	357,616 †		107,325
Eggs	857,890		
Total			\$2,537,792
* Bushels.	† Pounds.	Dozen.	
† Tons.	‡ Gallons.		

Photo in heading: Christian University, Canton.

exportation of mussel pearl used for nicknack ornamentation. A planing mill employs fifty men; a flouring mill sends flour to England and Scotland as well as into various cities of America; two salting



NOT FAR FROM THE MISSISSIPPI.



plants preserve pickles and tomato pulp; a canning factory and glass bottle goods factory uses large quantities of cucumbers; one car load of artesian well water is shipped weekly, and Canton also has a wholesale lumber yard. LaGrange has a large flouring mill, four button blank factories, and one finishing plant.

**TRANSPORTATION:**—St. Louis, Keokuk & Northwestern; Quincy, Omaha & Kansas City. Ten miles of pike roads out of Canton; drag system on dirt roads is highly successful.

**SCHOOLS AND COLLEGES:**—Christian University, Canton, founded 1851; College of Art and Science, Bible, Commercial College and Conservatory of Music; co-educational; LaGrange College, at LaGrange, established forty years; under supervision of Baptists; 100 students; co-educational; academic and music. There are four high schools: Canton, LaGrange, LaBelle, and Lyon, the latter being a co-operative high school supported by districts of Lyon township. There are eleven churches in Canton and seven in La Grange.

**ARTESIAN WELLS:**—Two artesian wells are located at LaGrange, and one at Canton. Water is bottled and shipped from all.

**TOWNS:**—Canton, 14 miles macadamized streets and alleys; public ownership water-works, horse fire department, electric lights. Ferry crosses river. Manufacturing, shipping, and farming. LaGrange location of LaGrange College; electric lights, public ownership; boat shipping point; manufacturing and farming. LaBelle, Lewistown, Monticello, all farming centers; latter is county seat. Poultry interests are of considerable importance to towns.

**NEWSPAPERS:**—LaGrange Tribune, Indicator; LaBelle Star; Lewistown Leader; Monticello: Lewis County Journal; Canton News, Press, Christian Educator.



A NORTH MISSOURI APIARY.



**L**INCOLN lies upon the west bank of the Mississippi river, forty miles north of St. Louis. Leading commercial and industrial activities are builded upon agriculture, live stock and horticulture. It is one of Missouri's leading wheat producing counties and also produces corn to the extent of a million or more dollars annually. Cattle, horses and mules and hogs are among surplus products of every farm; Buchanan College, at Troy, county seat, is a felt influence; and a distinguishing feature upon the east side of the county is that of the club house, several of which have been erected. County acreage is 382,720, equal to 598 square miles; improved farms embrace 252,984 acres of plow land. There are 2,763 farms, in average size, 92.9 acres. Valued at \$7,726,050.

**POPULATION:**—Estimated one-sixth German and German descent, mainly found in the south end of the county. White, 16,621; colored, 1,731; American born, 17,685; foreign born, 667; total, 18,352. Farm homes owned, 1,982; rented, 798; other homes owned, 630; rented, 503; total, 3,913.

**FINANCE:**—County tax, \$1.07; school tax up to \$1; average, 38 cents; total assessed valuation, \$5,445,454, one-third of actual valuation; county debt, \$184,000; no township debt.

**COAL:**—Underlies ten thousand acres in vicinity of Hawk Point and Truxton. Fields have just been opened. Burlington railroad building switch. Heretofore local demands have been supplied; mineral, wagon hauled. Near Sillex are vast deposits of white sand, suitable for glass manufacture. Portland cement materials are found in abundance near Elsberry. Neither sand nor stone is utilized.

**LAND:**—Beginning on the east with the strip of bottom land bounded by limestone cliffs traced by the St. Louis, Keokuk & Northwestern railroad, the land therein is of two classes: upper, protected; and lower, unprotected. Land levee-protected in north end sells at \$50 to \$75 an acre, owing to improvements and location. Behind the levee, near Winfield, land brings \$50 to \$60. In southeast section of the strip, low bottom

LINCOLN COUNTY'S 1902 CROP			
	ACRES	PRODUCT	VALUE
Corn	79,175	3,562,965 *	\$1,080,705
Wheat	42,540	1,042,150 *	625,310
Oats	16,380	636,830 *	159,210
Hay	19,880	29,815 †	223,615
Forage	1,100	1,285 †	6,425
Broom Corn	2	1,000 †	30
Clover Seed		150 *	1,000
Crass Seed		35 *	50
Tobacco	25	23,750 †	2,140
Potatoes	605	75,875 *	18,970
Vegetables	955		65,365
<b>Total</b>			<b>\$2,188,820</b>
LIVE STOCK AND PRODUCTS			
KIND	NUMBER	VALUE	
Cattle	25,678	\$ 894,535	
Horses	10,111	674,066	
Mules	1,752	131,400	
Asses and Jennets	56	5,600	
Sheep	10,827	32,480	
Swine	48,534	485,340	
Chickens	190,439		
Turkeys	6,704		
Geese	6,370	161,930	
Ducks	2,088		
Swarms of Bees	1,703	3,805	
Honey	56,767 †	7,095	
Wool	44,275 †	7,380	
Milk	2,434,368 †	150,185	
Butter	373,344 †		
Eggs	1,099,360 †	137,405	
<b>Total</b>		<b>\$2,681,220</b>	
* Bushels.	† Pounds.	Dozen.	
† Tons.	‡ Gallons.		

land, subject to overflow, sells as low as \$5 or \$10, up to \$30. Low portions of the middle townships are of similar value. This land often adjoins higher bottom worth \$50 and \$60. Soil in the bottom varies from a very sandy loam to a heavy black bottom soil, all exceedingly rich. West of this strip defined by a line north and south through New Hope, Brussels and a point three miles east of Moscow, lies a strip of hill land rising in places one hundred and fifty feet above the valleys and worth \$40, \$50 or \$60 an acre. Better portions are situated in the northern and southern one-

thirds. Cuivre river and other stream valleys comprise choicest of the strip. Adjacent to this on the west for an average width of six miles is a rougher, less productive land, selling for \$10 to \$30, depending upon amount of creek bottom land embraced. West of this land gets gradually better, increasing in price to a range of \$20 to \$35. Land west of Troy brings as high as \$40; that to the northward, \$25, and Cuivre bottom land, \$60, all being within a few miles of town. More desirable locations around Elsberry bring \$40 to \$60. In extreme northeast Lincoln county are a series of round-rising hills, three hundred to four hundred feet high, trending north and south, peculiarly valuable as fruit lands. Section is known as "Knob Lands." High rolling prairie occupies western one-third of county. All west of line from Louisville to Millwood and southwardly through Linn's Mill, is of this character, except frequent bluffs are found along creeks. Prairie sells at \$30 to \$40 an acre, except in extreme southwest, where it can be had at \$15 to \$30. Best improvements are in northeast, southeast, west central and southwest sections. Two-thirds land grew oak, ash, hickory, walnut, maple, elm, sycamore, ash, linden and hackberry.

**FLOUR:**—Is the leading manufactured product. Mills at Troy, Winfield, Moscow and Silex.

**TRANSPORTATION:**—St. Louis, Keokuk & Northwestern, 21 miles roadbed; St. Louis & Hannibal, 33 miles; Burlington, 31 miles.

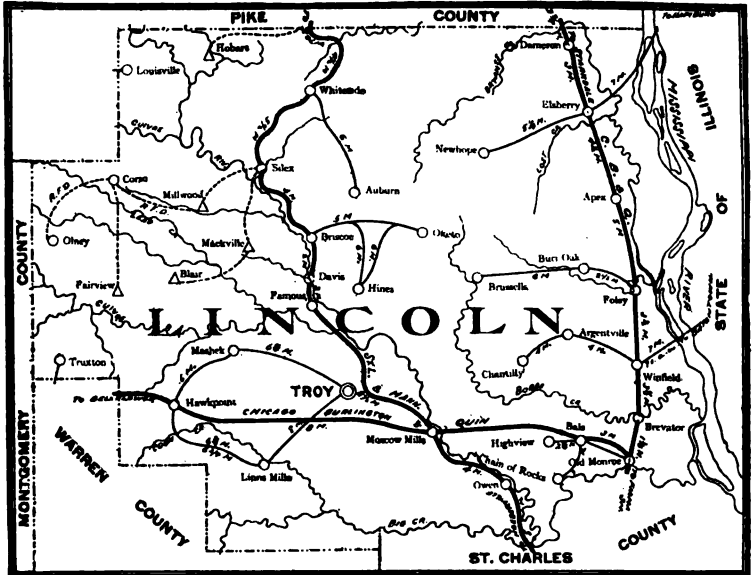
**TURNPIKE ROADS:**—Twenty-three miles, connecting Elsberry to New Hope; Auburn to Silex to Olney. Twelve miles of rock and gravel road extends south and southwest from Troy.

**BUCHANAN COLLEGE:**—At Troy; enrollment, 119; established 1894. Nonsectarian.

Winfield is location of sulphur spring; Whiteside location of lithia water spring; undeveloped. Club houses along sloughs and lakes fringing the Mississippi river, owned largely by St. Louis sportsmen.

**TOWNS:**—Troy, Elsberry, Winfield, Silex, Moscow, Truxton, Foley, Olney, Whiteside and New Hope; all supported by agriculture.

**NEWSPAPERS:**—Troy Free-Press; Silex Index; Elsberry Democrat.



OF GOOD BREEDING.



**F**ARMING and stockraising, railroading and manufacturing are the activities employing Linn's population. The county is located in northern Missouri,

twenty miles north of the Missouri river, half-way between St. Joseph and Hannibal. Cattle and corn values add three millions; horses and mules contribute a million and two railroad division points account for a million dollars to Linn county. In square miles there are 620, or 396,800 acres, 304,720 acres of which are improved farms. There are 2,925 farms, embracing 134.5 acres each of land utilized for grain, pasture and feed-lot purposes; value, \$9,297,810.

LINN COUNTY'S 1902 CROP			
	ACRES	PRODUCT	VALUE
Corn	83,686	3,765,870 *	\$ 1,148,590
Wheat	8,690	88,120 *	52,270
Oats	5,268	173,780 *	43,445
Hay	77,000	115,495 †	635,225
Forage	4,980	5,750 †	28,750
Flax	1½	10 *	10
Broom Corn	3	1,500 †	40
Clover Seed		50 *	330
Grass Seed		22,000 †	30,800
Tobacco	16	15,200 †	1,370
Potatoes	780	97,750 *	24,440
Vegetables	1,030		50,505
Total			\$2,015,775
LIVE STOCK AND PRODUCTS			
KIND	NUMBER	VALUE	
Cattle	54,254	\$ 1,768,255	
Horses	12,710	847,385	
Mules	1,725	129,375	
Asses and Jennets	45	4,500	
Sheep	14,840	44,520	
Swine	39,974	399,740	
Chickens	166,076		
Turkeys	5,165	147,285	
Geese	6,669		
Ducks	2,536		
Swarms of Bees	3,125	9,140	
Honey	104,167 †	13,040	
Wool	67,070 †	11,180	
Milk	3,143,211 ‡	217,730	
Butter	59,412 ‡		
Eggs	966,570	117,072	
Total		\$3,704,150	
* Bushels.	† Pounds.	Dozen.	
‡ Tons.	§ Gallons.		

**POPULATION:**—White, 24,717; colored, 786; American born, 24,455; foreign born, 1,048; total, 25,503. Farm homes owned, 2,211; rented, 644; other homes owned, 1,600; rented, 1,309; total families, 5,764.

**FINANCE:**—County tax 32 cents on \$100 valuation; school tax average 50 cents; total assessed valuation \$7,005,000; one-third of real valuation. No county debt; no township debt.

**MINING:**—Eight coal shafts operating; 307 men employed; 79,221 tons annual output, worth \$139,440. Veins 26 to thirty inches thick, 130 to 210 feet deep; mines located near Brookfield, Marceline, Bucklin and Ste. Catharine.

**TIMBER:**—Once covered sixty per cent of surface, being the eastern one-half and ten per cent along streams of other portions. Embraced white, burr, black, red and pin oak, ash, sycamore, hickory, walnut and elm. Two-thirds removed. Portable saw mills in every township. Walnut logs have in past made an industry, and are yet exported from Purdin, Brownling and Brookfield; likewise white oak railroad ties. Hickory cord wood is shipped to Omaha for meat curing.

**LAND:**—Western one-half of Linn county is a rolling prairie with occasional small streams. It is seldom flat except in creek bottoms. Eastern half embraces strips of a billowy sort of prairie, though this

Photos in heading: Hereford Cattle; Hay Rake Factory, Linneus.

11,328 acres of oats, crop of 30 bushels to acre; 46,550 acres in timothy hay, raised 98,490 tons of hay and five to fifteen bushels seed; one-half uncultivated lands are in blue grass.

**POULTRY AND DAIRYING:—** Poultry and eggs are large source of income. From Chillicothe alone there were shipped last year 652,372 pounds of poultry; 125 car loads of eggs gathered from Livingston and surrounding counties; 200,000 pounds of wool; one-half million pounds of hides and \$20,000 worth of raw furs gathered within radius of 100 miles; 60,000 pounds tallow and 2,000 pounds beeswax. Farmers are rapidly increasing dairying interests.

Chillicothe is mule market center for buyers active over portions of Iowa, Missouri, Illinois and Nebraska.

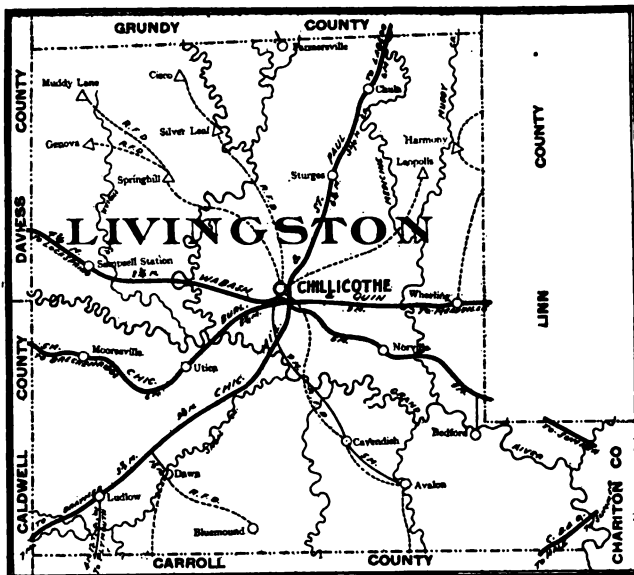
**RAILROADS:**—Chicago, Milwaukee & St. Paul division—end employs 300 men at Chillicothe. Mileage within county: Chicago, Milwaukee & St. Paul, 31.08; Burlington, 23.62; Wabash, 25.61; Chicago, Burlington & Kansas City, 3.07.

**SCHOOLS:**—Chillicothe High School approved by University of Missouri. Catholic church has schools for boys, for girls and a monastery; also hospital. Young Ladies' Academy is conducted by Sisters of St. Joseph; 200 pupils; seven teachers; literary, scientific, music, art and needle-work. St. Columbian Parish School has 125 boys and girls enrolled. Franciscan Monastery connected with church; three fathers. Hospital conducted by St. Mary sisters; cost \$35,000; eleven trained nurses. One hundred families in St. Joseph's parish. State Industrial Home for Girls; 110 inmates, corresponds to Training School for Boys at Boonville. Maupin's Business College; 100 students. Chillicothe Normal School; private educational institution; 746 students enrolled; nineteen in faculty; established 23 years.

**WATER:**—Chillicothe is supplied from driven wells alongside Grand river. At 350 feet is found sulpho-saline water; Mooresville Mineral Spring; Roach lake and Dayton lake near Chillicothe are play grounds.

**Towns:**—Chillicothe, county seat, railroad center; waterworks, gas, electric light; school town; live stock market; flouring mills; department store employing fifty people; foundry; Chula, Wheeling, Utica, Mooresville, Dawn, farming centers.

**NEWSPAPERS:**—Chillicothe Democrat, Constitution, Tribune, Crisis; Chula News of Chula; Wheeling Democrat; Utica Herald; Avalon Aurora.



**HORSES—FRANK PLATTER, CHILLICOTHE.**

# LIVINGSTON



**L**IVINGSTON is one of Missouri's first counties by virtue of four foremost causes: agriculturally it is among the leading; it is a center of livestock; intersection of three main line railroads one of which maintains a division point at Chillicothe; location of Chillicothe Normal School. County is situated sixty miles due east of St. Joseph. Five hundred and twenty square miles of land, equal to 332,800 acres, are embraced. Acreage under cultivation 246,638; number of farms, 2,752; average size 116.7 acres including lands of various characters; total estimated value \$8,492,481. Hereford, Shorthorn and Galloway cattle herds are among the richest in the State. Chillicothe is one of the largest mule and horse markets in Missouri.

**POPULATION:**—Fifty Welsh families near Dawn. White, 21,507; colored, 795; American born, 21,463; foreign born, 839; total, 22,302. Farm homes owned, 1,896; rented, 794; other homes owned, 1,289; rented, 958; total families, 4,937.

**FINANCE:**—County tax 40 cents on one hundred dollars; school tax 10 cents to 90 cents, average, 40 cents; total assessed valuation \$7,904,549; assessed valuation per cent of real value, 30; no county debt; no township debt.

**LAND:**—Three classes of land are found: broad bottoms along Grand river and Medicine creek; high rolling prairie between east fork of Grand river and Medicine creek, running north from center of county, and across the county south of Grand river bottom; and rougher, hill land, between forks of Grand river. Grand river bottom reaches three miles in width and Medicine creek bottom averages two miles wide. Serious overflows once in seven years. Price \$25 to \$40; reaching \$60 within three miles of Chillicothe. Soil black loam, less fertile in spots in southeast. Ridge land, rolling prairie, best of the county's offerings, embracing one-third the county, \$40 to \$65. Altitude 970 feet average. Soil deep above impervious clay. Rougher, hill land, between forks of Grand river, and small strip south of Dawn, \$25 to \$45. Fine orchards and blue grass meadows are characteristic. Fine farm improvements; number of elegant country homes. Wheat adaptable to all lands. Blue grass native. Farm yields for last year are as follows: 87,790 acres in corn, crop 5,000,000 bushels; 25,891 in wheat, raised 850,000 bushels; 10,780 acres in rye; grew 275,448 bushels;

LIVINGSTON COUNTY'S 1902 CROP			
	ACRES	PRODUCT	VALUE
Corn	86,700	3,685,133 *	\$1,180,815
Wheat	8,500	212,440 *	122,150
Oats	4,456	178,240 *	46,340
Hay	46,598	81,495 †	407,475
Forage	4,085	5,445 †	27,225
Broom Corn	118	64,000 †	1,785
Clover Seed		410 *	2,235
Grass Seed		4,140 *	6,415
Tobacco	14	12,600 †	1,290
Potatoes	899	112,375 *	26,970
Vegetables	835		50,975
Total			\$1,853,665
LIVE STOCK AND PRODUCTS			
KIND	NUMBER	VALUE	
Cattle	36,928	\$1,200,160	
Horses	11,590	772,665	
Mules	1,727	129,825	
Asses and Jennets	46	4,000	
Sheep	10,739	35,795	
Swine	54,811	518,110	
Chickens	160,898 †		
Turkeys	2,755 †	121,435	
Geese	2,617 †		
Ducks	2,035 †		
Swarms of Bees	3,476	8,205	
Honey	115,867 †	14,485	
Wool	55,350 †	9,225	
Milk	3,043,085 †	201,655	
Butter	595,562 †		
Eggs	916,110 †	114,515	
Total		\$3,190,375	
* Bushels.	† Pounds.	Dozen.	
† Tons.	\$ Gallons.		

Photos in heading: A Representative Cattle Barn; Corrector, T. F. B. Sotham, Chillicothe.

11,328 acres of oats, crop of 30 bushels to acre; 46,550 acres in timothy hay, raised 98,490 tons of hay and five to fifteen bushels seed; one-half uncultivated lands are in blue grass.

**POULTRY AND DAIRYING:—**  
Poultry and eggs are large source of income. From Chilli-cothe alone there were shipped last year 652,372 pounds of poultry; 125 car loads of eggs gathered from Livingston and surrounding counties; 200,000 pounds of wool; one-half million pounds of hides and \$20,000 worth of raw furs gathered within radius of 100 miles; 60,000 pounds tallow and 2,000 pounds beeswax. Farmers are rapidly increasing dairying interests.

Chillicothe is mule market center for buyers active over portions of Iowa, Missouri, Illinois and Nebraska.

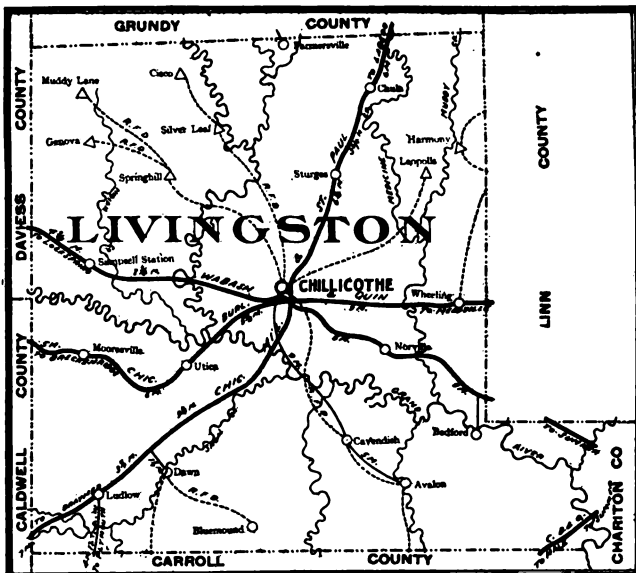
**RAILROADS:**—Chicago, Milwaukee & St. Paul division—end employs 300 men at Chillicothe. Mileage within county: Chicago, Milwaukee & St. Paul, 31.08; Burlington, 23.62; Wabash, 25.61; Chicago, Burlington & Kansas City, 3.07.

**SCHOOLS:**—Chillicothe High School approved by University of Missouri. Catholic church has schools for boys, for girls and a monastery; also hospital. Young Ladies' Academy is conducted by Sisters of St. Joseph; 200 pupils; seven teachers; literary, scientific, music, art and needle-work. St. Columbian Parish School has 125 boys and girls enrolled. Franciscan Monastery connected with church; three fathers. Hospital conducted by St. Mary sisters; cost \$35,000; eleven trained nurses. One hundred families in St. Joseph's parish. State Industrial Home for Girls; 110 inmates, corresponds to Training School for Boys at Boonville. Maupin's Business College; 100 students. Chillicothe Normal School; private educational institution; 746 students enrolled; nineteen in faculty; established 23 years.

**WATER:**—Chillicothe is supplied from driven wells alongside Grand river. At 350 feet is found sulpho-saline water; Mooresville Mineral Spring; Roach lake and Dayton lake near Chillicothe are play grounds.

**TOWNS:**—Chillicothe, county seat, railroad center; waterworks, gas, electric light; school town; live stock market; flouring mills; department store employing fifty people; foundry; Chula, Wheeling, Utica, Mooresville, Dawn, farming centers.

**NEWSPAPERS:**—Chillicothe Democrat, Constitution, Tribune, Crisis; Chula News of Chula; Wheeling Democrat; Utica Herald; Avalon Aurora.



**HORSES—FRANK PLATTER, CHILLICOTHE.**





**O**NE hundred and sixty-five miles south of Kansas City, in the extreme southwest corner of Missouri, is McDonald county, embracing 580 square miles of land surface. Its 87,712 acres of improved lands are devoted to fruit and to grain. The balance of the county, 283,488 acres, is timbered and unimproved. As a whole the county is mountainous. Number of farms, 2,066; average size, 90.3 acres; estimated actual valuation, \$2,111,536. Leading farm products are corn, horses, hogs, cattle, wheat, butter and milk, eggs, hay.

**POPULATION:**—White, 13,560; colored, 14; American born, 13,474; foreign born, 100; total, 13,574. Farm homes owned, 1,446; rented, 599; other homes owned, 385; rented, 353; total families, 2,783.

**FINANCE:**—County tax, 60 cents on one hundred dollars; school tax from 40 cents to 81 cents; total assessed valuation, \$2,213,516; assessed valuation per cent of actual valuation, 50, on improved lands; assessment based on \$1.25 an acre for unimproved lands.

**TIMBER:**—Consists of all varieties of oak; hickory, walnut, wild cherry, sycamore, maple, ash and locust. Formerly there was a small per cent of pine, but this has been removed. Saw mills are located at Southwest City, Pineville, Lanagan, and Madge. There are many portable mills, making mine props and hardwood lumber used in adjoining sections. Native lumber, \$1.

**COAL:**—One mine at McNatt; operations small. Tiff is plentiful, but not extensively utilized. Lead, zinc, and iron indications are found, but there are no mines.

**LAND: CHARACTER AND PRICE:**—Surface of McDonald embraces all characters of land. One-fourth of the county, largely in the north one-half, is high, flat land, timbered with large growth trees. Four plots are prairie, being about equally divided among the four corners of the county, embrace 38,000 acres. The balance is rough, broken land, precipitous along the streams, and river and creek bottoms, alluvial and fertile. The chief bottoms lie along Elk and Indian rivers, and Buffalo and Sugar creeks. Southeast portion of the county is most rugged. The soil of prairies is a prairie loam, varying in color from mulatto to black. Improved farms here are worth \$20 to \$30, with a very few farms bordering towns bringing \$40 to \$50. Flatwoods soil is

McDONALD COUNTY'S 1902 CROP			
	ACRES	PRODUCT	VALUE
Corn	28,954	1,013,390 *	\$ 319,220
Wheat	24,985	424,745 *	232,410
Oats	2,343	58,575 *	15,320
Hay	7,811	11,715 †	82,005
Forage	895	1,195 †	5,975
Flax	7	28	30
Broom Corn	20	11,000 †	315
Clover Seed		450 *	2,320
Grass Seed		40 *	65
Cotton	15	4,500 †	315
Tobacco	35	22,750 †	2,275
Potatoes	471	37,690 *	13,190
Vegetables	635		30,700
Total			\$705,740
LIVE STOCK AND PRODUCTS			
KIND	NUMBER	VALUE	
Cattle	9,697	\$ 212,425	
Horses	4,523	271,380	
Mules	1,431	93,015	
Asses and Jennets	71	6,390	
Sheep	6,568	19,700	
Swine	23,363	233,630	
Chickens	87,016		
Turkeys	2,644		
Geese	2,371	42,925	
Ducks	2,534		
Swarms of Bees	787	1,780	
Honey	26,233 †	3,280	
Wool	19,890 †	3,315	
Milk	1,418,138 †	99,810	
Butter	252,876 †		
Eggs	649,570	81,195	
Total		\$1 098,350	
* Bushels.	† Pounds.	Dozen.	
† Tons.	§ Gallons.		

Photo in heading: Apples by the Acres.

generally mulatto, though in some places it is of less fertile color. This is the ideal apple orchard land, worth \$10 to \$15. Bottom land, all of which is now in cultivation and improved with buildings, sells at \$25 to \$35. The rough, bluffy land is very largely unimproved. It sells at \$2.50 to \$4 an acre. It bears gravel. For fruit production it is first class. Eighty thousand acres of hill land in the county are owned by non-resident companies, which hold the property at \$3 to \$4 an acre, making effort to secure families for settlement. It is estimated that \$5 per acre would convert this land into cultivable shape.

**MANUFACTURES:**—Flour, lumber, railroad ties, mining timbers, logs constitute the manufactured products. Timber for railroad ties, mining timbers, and hardwood lumber is inexhaustible. It is found upon two hundred and fifty thousand acres.

**TRANSPORTATION:**—Direct railroads to Kansas City, St. Louis, and the southwest. Kansas City Southern has 20.96 miles; Frisco, 2.20 miles of taxed track.

**SUNDAY SCHOOLS:**—In this regard the county is unusual. Along railroads and in northern half, churches are easily accessible. Sunday Schools are organized at each of these places. Elsewhere school houses are pressed into service.

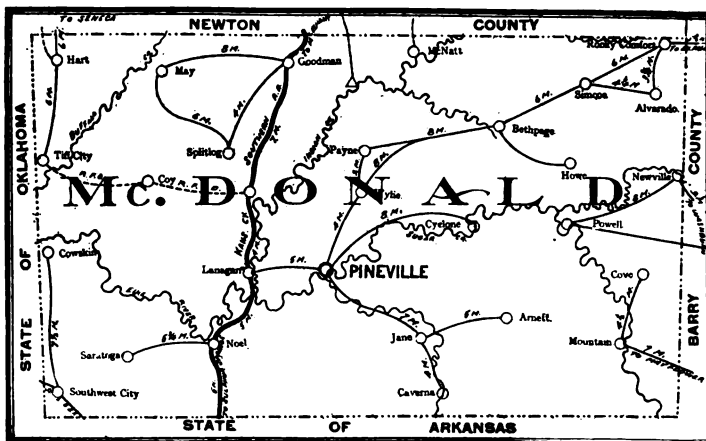
**SCHOOLS:**—Southwest City has high schools. Pineville, Anderson, and Lanagan, schools of more than one room.

**SPRINGS:**—Are numerous. Saratoga, Indian, Healing, Sulphur, Lanagan and Noel Springs claim laxative properties.

**FISH AND GAME:**—Salmon, perch, suckers, and catfish are caught from small streams. Wild turkey shooting is a chief pastime for sportsmen, both local and non-resident.

**TOWNS:**—Pineville, county seat; Southwest City, population 691; Tiff City, population 164; Indian Springs; Anderson; Lanagan, railroad point for county seat. All are supported by fruit and farming interests.

**NEWSPAPERS:**—Pineville Democrat, Herald; Anderson Argus; Southwest City Republic; Rocky Comfort; McDonald County Guide.



PARTIAL VIEW OF ORCHARD AT LANAGAN.



**M**ACON is the greatest coal producing county of Missouri. It is in the St. Joseph-Hannibal latitude, and the third county west of the Mississippi river. There are seventeen mines, operating to the aggregate output of 1,198,133 tons a year. Schools are of the highest plane. Blee's Military Academy, at Macon, is one of the foremost military schools in the west. Manufacturing is a large industrial element, to the end of the county's advance position. Agriculture and live stock add largely to the gross worth of the 4,233 farms—\$1,500 to every farmer for these two items. The aggregate of the cattle, corn and horses and mules overreach the million dollar mark. These three items in one year amounted to \$4,270,270.

MACON COUNTY'S 1902 CROP			
	ACRES	PRODUCT	VALUE
Corn	103,410	4,446,555 *	\$ 1,356,200
Wheat	5,850	146,200 *	87,720
Oats	4,155	141,200 *	35,300
Hay	72,020	115,230 †	576,160
Forage	10,500	12,250 †	61,250
Broom Corn	75	37,000 †	1,020
Clover Seed		75 *	495
Grass Seed		2,750 *	3,850
Tobacco	45	40,850 †	3,675
Potatoes	1,095	120,430 *	30,115
Vegetables	1,225		54,325
Total			\$ 2,215,100
LIVE STOCK AND PRODUCTS			
KIND	NUMBER	VALUE	
Cattle	48,518	\$ 1,576,835	
Horses	15,869	1,057,935	
Mules	3,724	270,300	
Asses and Jennets	230	23,000	
Sheep	16,608	49,825	
Swine	42,266	422,660	
Chickens	223,979		
Turkeys	6,912	171,465	
Geese	6,075		
Ducks	3,031		
Swarms of Bees	5,500	12,720	
Honey	186,333 †	23,290	
Wool	63,700 †	10,615	
Milk	3,765,304 \$	242,835	
Butter	749,608 †		
Eggs	1,239,460 †	154,980	
Total		\$ 4,025,410	
* Bushels.	† Pounds.	Dozen.	
† Tons.	§ Gallons.		

**POPULATION:**—White, 31,438; colored, 1,580; American born, 31,122; foreign born, 1,896; total, 33,018. Farm homes owned, 3,221; rented, 997; other homes owned, 1,547; rented, 1,620; total families, 7,385.

**FINANCE:**—County tax, 50 cents on one hundred dollars valuation; school tax from 10 cents to \$1.50; average, 47 cents; total assessed valuation, \$11,211,497; farm real estate is assessed on basis of 25 per cent of actual valuation; town real estate on 33 1-3 per cent basis.

**TIMBER:**—Originally there stood a large area of timber, mostly in the western half of the county. It grew largest along the Chariton river and its many tributaries. Oaks, hickory, elm, and walnut were the most numerous. Considerable timber remains to-day, and is to be had at almost any price.

**MINERALS:**—Coal is the greatest mineral. Mines are located near Ardmore, Keota, Bevier, Lingo, and Macon. The same seam of mineral is worked throughout the county. It averages four feet in thickness, at a depth of eighty to one hundred and fifty feet. Nineteen hundred men are employed in the mines. Clay

for brick manufacture is used for building purposes within the county. Limestone is deposited along all the streams. Sand is available along the Chariton river.

**LAND:**—In physical area the county contains 820 square miles of land surface, 524,800 acres, of which 364,444 are in a state of cultivation. The actual farming value of land in the county is estimated in aggregate at \$13,586,963. This estimate does not consider the mineral value. Coal varying in thickness from three feet to four feet ten inches underlies the land and forestalls accurate attempt at general valuation estimate. Dealing with the purely agricultural value of the land, one-half of the county may be bought for \$45

an acre, and the balance, lying mainly along streams and bearing numerous small strips of second growth timber, at \$27.50. Macon comes within the blue-grass belt. Blue grass takes all pastures. The eastern half of the county is of comparatively level lay, and the soil is the vegetable loam common to the level prairie of northeast Missouri. It grows all grains of the zone. Soil is of a uniform depth, two to four feet, over clay. The western half of the county is rolling. Along the streams are frequent cliffs, confined to a perpendicular height of forty feet. Owing to the rolling character of the land, soil depth varies more than in the eastern half, ranging from six inches on hilltops to six feet on lesser altitude. Blue grass is native.

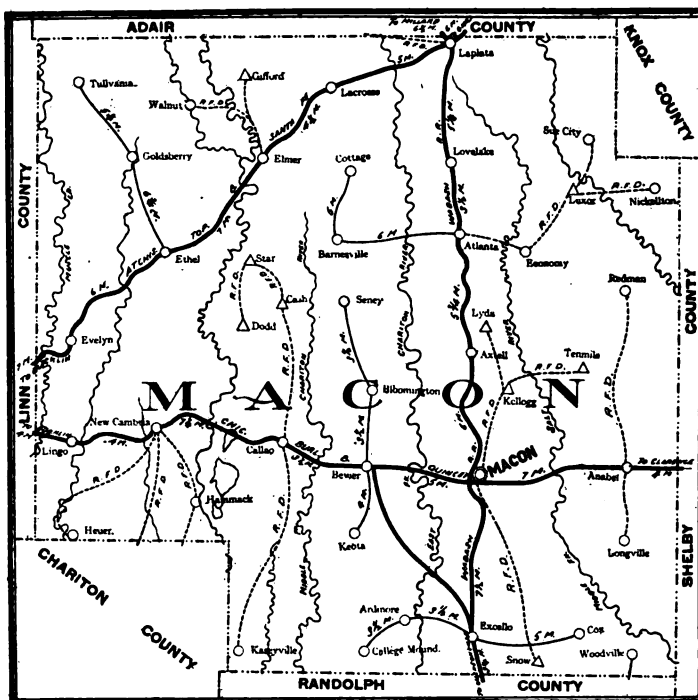
**MANUFACTURES:**—These are not numerous, though they are of comparatively large individual size. At Macon is a large wagon and carriage factory, a scissor manufacturing plant, products of which are sold throughout this section of States. There are also flouring mills of considerable capacity, cold storage plants, cigar factories, brick making establishments.

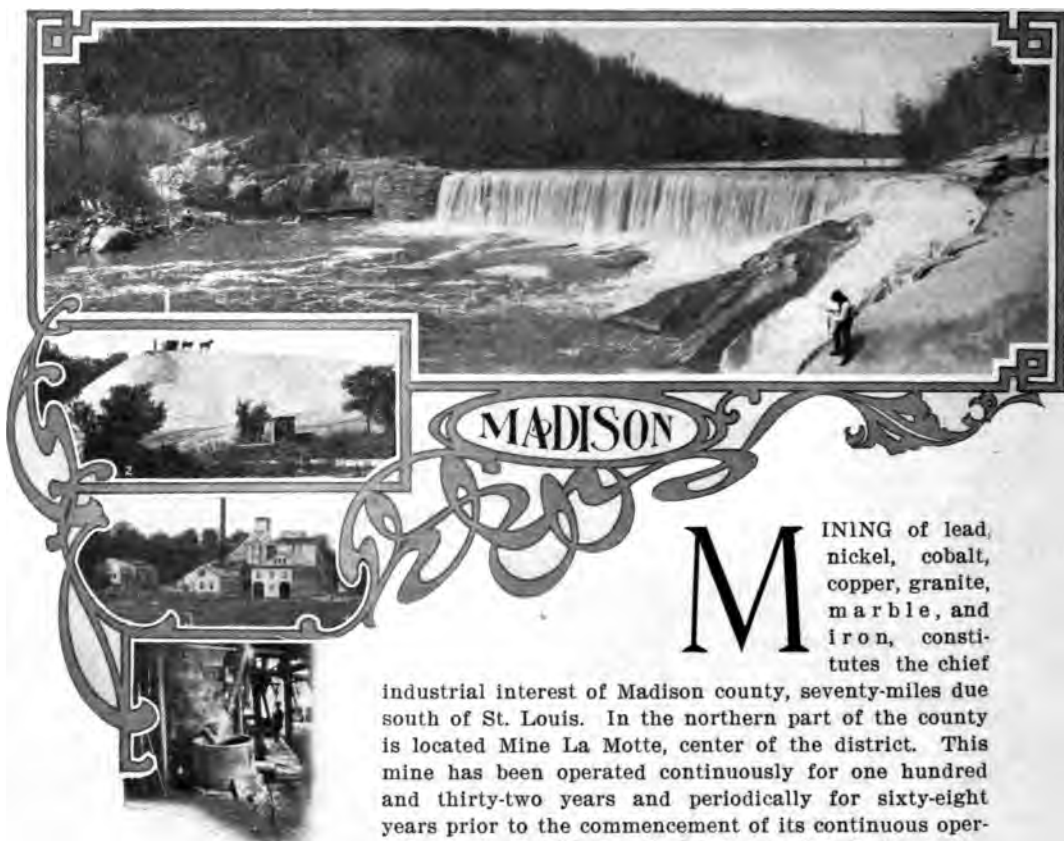
**TRANSPORTATION:**—Hannibal & St. Joseph; Wabash main line; Iowa & St. Louis; Atchison, Topeka & Santa Fe; Missouri & Louisiana short line.

**Towns:**—Macon county seat, population 4,068; supported by mining, manufacturing, school and farming interests. La Plata, population 1,345, a cattle and agricultural center, situated upon high prairie. Bevier, population 1,808, mining and agriculture. Callao, 498; Ethel, 397; New Cambria, 325; Elmer, 236,

and College Mound, 230, are supported mainly by agricultural and live stock interests.

**NEWSPAPERS:**—Macon: Times-Democrat, Republican, Record; New Cambria Independent; La Plata Home Press, Republican; Bevier Appeal; Callao Herald; Atlanta News; Ethel Courier.





it is now giving up copper in addition. Madison county embraces 492 square

miles of land, equal to 314,880 acres. Second to mining in industrial importance is farming. Sixty-seven thousand, two hundred and twenty-five acres are under cultivation, the rest being timbered or mine properties. There are 1,163 farms, of an average size of 127 acres, of an estimated actual valuation of \$1,968,770. Private dairying is increasing among the best farmers. Products of milk and butter now amount to \$67 a year for each farmer in the county.

**POPULATION:**—White, 9,732; colored, 243; American born, 9,800; foreign born, 175; total, 9,975. Farm homes owned, 890; rented, 289; other homes owned, 283; rented, 527; total families, 1,989.

**FINANCE:**—County tax, 40 cents on one hundred dollars valuation; school tax from 40 cents to 80 cents; average, 60 cents; assessed valuation, \$2,261,571; assessed valuation per cent of actual valuation, 65; county debt, \$4,800; no township debt.

**TIMBER:**—Good timber is yet abundant. Hardwood lumber and railroad tie exports are considerable. White oak logs three feet in diameter find their way to the railroad. Fredericktown is a timber center. Along St. Francis river, in the western part, are large bodies of white oak in almost undisturbed state. White oak is the chief timber. Next to white oak in point of commercial value is pine, in southwestern corner of the county. Black oak, post oak, yellow oak, elm, sycamore and maple are other varieties.

MADISON COUNTY'S 1902 CROP			
	ACRES	PRODUCT	VALUE
Corn	15,961	606,518 *	\$ 227,445
Wheat	10,218	183,924 *	108,515
Oats	1,976	43,470 *	14,410
Hay	9,775	14,660 †	131,910
Forage	1,005	1,170 †	6,850
Broom Corn	4	2,000 †	55
Clover Seed	3	190 *	1,045
Cotton	3	900 †	75
Tobacco	25	17,750 †	1,775
Potatoes	349	31,110 *	15,075
Vegetables	500		18,935
Total			\$525,200
LIVE STOCK AND PRODUCTS			
KIND	NUMBER	VALUE	
Cattle	8,995	\$ 202,387	
Horses	2,416	144,960	
Mules	1,060	63,600	
Asses and Jennets	17	1,530	
Sheep	4,751	14,233	
Swine	13,971	139,710	
Chickens	30,927		
Turkeys	998		
Geese	2,822	23,120	
Ducks	991		
Swarms of Bees	835	1,511	
Honey	27,853 †	3,179	
Wool	15,824 †	2,637	
Milk	856,844 \$	67,790	
Butter	171,167 †		
Eggs	174,700 †	21,846	
Total		\$686,847	
* Bushels.	† Pounds.	Dozen.	
† Tons.	\$ Gallons.		

Photos in heading: Silver Dam, St. Francis River; La Motte District Lead Mining Scene; Plant American Lead Co.; Moulding Lead in Smelter.

**MINERALS:**—Signs of minerals exist all over the county. Centering around Mine La Motte, is a lead district of large output. This main mine, worked for generations, has yielded, besides enormous quantities of lead, nickel and cobalt to an extent claimed to be ninety per cent of the output of the United States. Granite and marble are quarried at a point twelve miles southwest of Fredericktown and in southeastern part of county. A superior quality of white building stone is deposited near Fredericktown. Kaolin and pottery clay are shipped from south county railroad points.

**LAND:**—Rolling and mostly timbered; sometimes very rough. Soil is gravelly clay loam, with porous subsoil. Often it is stone-bearing in uplands. Bottoms are alluvial and of unsurpassed fertility. Eight to ten miles from railroad timbered land may be bought at \$1.25 to \$3 an acre. Improved uplands are selling at \$8 to \$15; bottom lands, improved, \$15 to \$20. Best farming lands of county are found in north central portion, near Fredericktown. There are 6,187 acres of government land, awaiting homestead, at \$1.25 an acre. This entire acreage is rock-bearing and rugged, but sustains a heavy timber growth.

**FRUIT:**—The red clay lands with subsoil of porous, gravel-laden subsoil are admirably adapted to fruit growing. Apples, peaches, plums, pears, and berries of all kinds may be profitably grown. The industry is in its infancy.

**MANUFACTORIES:**—Saw mills, flouring mills, granite and rock crushing mills, stave factories, wool carding mills, distillery, ice plant, and planing mill. These industries are of local dimension.

**TRANSPORTATION:**—Frisco main line, St. Louis to Memphis, and Belmont branch of Iron Mountain railroad.

**MINERAL SPRINGS:**—White Spring located eight miles south of Fredericktown, has medicinal value and is a health resort. Some of the most entrancing scenery of the State is along the St. Francis river near Silvermine.

**TOWNS:**—Fredericktown, county seat, population 1,577; shipping point for lumber, mines' output and farm produce. Marquand, saw mills and live stock. Mine La Motte, mining town and farming center.

**WATER:**—Big and Little St. Francis rivers, Castor river. Springs are abundant.

**NEWSPAPERS:**—Fredericktown Democrat-News; Fredericktown Tribune.



COMPANY, ATTENTION!



**F**OR greatest usefulness Maries county relies upon its mineral, agricultural and horticultural resources, rich and varied. At the present time but 92,440 of its 329,600 acres are in a state of improvement. The balance is enshrouded in a heavy, coarse fibered cloak of timber, forty per cent black oak, twenty per cent white oak, a like percentage of post oak, and the balance of scrub oak, walnut, sycamore, maple, hickory, ash and hackberry. This immense timber area represents, in itself, an important commercial asset, and its removal, together with consequent pasturing of the

lands, will create blue grass pastures and promote live stock interests. Maries is situated twenty miles south of Jefferson City, capital of Missouri. Its surface is rough, in rare places mountainous, but the county is crossed by the Gasconade and Maries rivers and tributaries, which account for forty-eight thousand acres of river and creek bottoms, black soiled and fertile. Total value of farms is estimated at \$2,235,660. Number of farms is 1,619, embracing an average of 153.5 acres, plow land and timbered. Last year there were \$407 worth of cattle, horses and mules for each farmer in the county.

**POPULATION:**—White, 9,615; colored, 1; American born, 9,335; foreign born, 281; total, 9,616. Farm homes owned, 1,123; rented, 491; other homes owned, 117; rented, 111; total families, 1,842. German is the type of those foreign born.

**FINANCE:**—County tax, 45 cents on one hundred dollars valuation; school tax, average, 46 cents; total assessed valuation, \$1,988,403; fifty per cent of actual value; no county nor township debt.

**TIMBER:**—Main part of commercial timber is in the western half of county, where it has been little drawn upon. Railroad ties have been the leading timber product. Half a dozen portable saw mills provide rough board lumber for local demand.

**MINERALS:**—Lead, zinc, iron, copper, and limestone comprise the minerals. Wholly undeveloped. Fire

MARIES COUNTY'S 1902 CROP.			
	ACRES	PRODUCT	VALUE
Corn	29,961	898,980 *	\$ 265,300
Wheat	13,025	216,565 *	119,110
Oats	8,563	103,325 *	27,880
Hay	11,162	16,745 †	117,215
Forage	1,030	1,285 †	6,425
Broom Corn	7	8,500 †	95
Clover Seed		350	1,980
Tobacco	42	29,400 †	2,795
Potatoes	346	30,790 *	12,732
Vegetables	335		20,060
<b>Total</b>			<b>\$ 572,975</b>
LIVE STOCK AND PRODUCTS			
KIND	NUMBER	VALUE	
Cattle	12,386	\$ 209,850	
Horses	8,921	225,260	
Mules	1,912	114,720	
Asses and Jennets	52	4,680	
Sheep	7,422	22,265	
Swine	2,137	211,370	
Chickens	68,957		
Turkeys	1,257		
Geese	5,785	35,070	
Ducks	1,394		
Swarms of Bees	889	870	
Honey	12,300 †	1,540	
Wool	23,949 †	3,990	
Milk	916,400 †	59,305	
Butter	149,587 †	7,450	
Eggs	865,425 †	45,680	
<b>Total</b>		<b>\$ 1,045,060</b>	
* Bushels.	† Pounds.	Dozen.	
† Tons.	§ Gallons.		

clays, gravel, and sand offer an industry, with railroad facilities extended.

**LAND:**—Soils of all uplands are of limestone origin and have a generous admixture of small fragments of flint. Subsoil is a red clay, usually rich in most of the mineral elements necessary to plant growth. Valley lands are extensive, proportionately. The largest bottom areas are abutting the Gasconade river, Big Maries creek, Little Maries creek, Bourbeuse, Peavine, Dry Fork, Long, Cedar, Springs, Fly,

Dry, and Tavern creeks. Eighty-five per cent of the county's 515 square miles of area is hill land, three-fifths of which, with timber removed, would be arable land. Government land, 2,100 acres. Best lands of the county are in the eastern one-half and along the Gasconade river and Big Maries creek. Those in highest cultivation bring \$20 to \$30 an acre; unimproved, best, \$3 to \$10 an acre; rough, \$1.25 to \$3. Best upland farms, partially in cultivation, may be bought at \$5 to \$15 an acre.

**FRUIT:**—One-half of the land is adapted to fruit growing. Flint hills and level plateaus are excellent locations for apple and peach orchards, and are close to market. Strawberries and tomatoes in those sections close to railroad may be made a profitable industry. The soil is well filled with gravel and overlies a gravelly clay subsoil, insuring bottom drainage necessary to best fruit results.

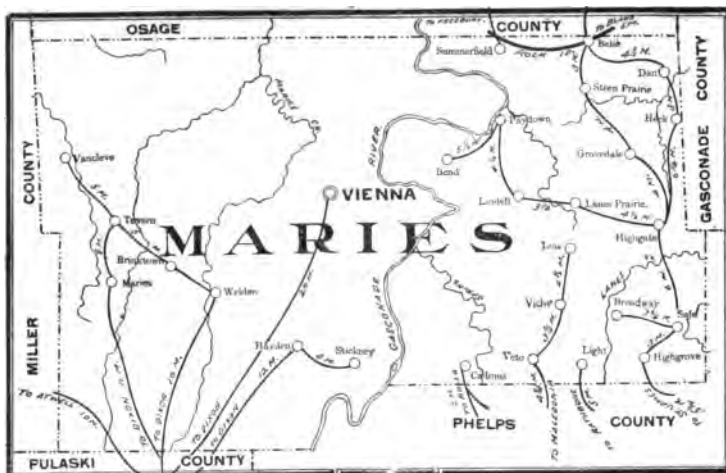
**MANUFACTURES:**—Flouring mills, wool carding mills, and hardwood saw mills are the manufacturing base. Farmers are individually engaged in making railroad ties during the months unfit for farming.

**TRANSPORTATION:**—Maries county is situated between the Rock Island and the St. Louis & San Francisco railroads, which parallel its north and south boundary lines. The first road passes through a small part of the northeastern corner, skirting the balance of the border. Gasconade river, third in size in Missouri, affords log and railroad tie transportation.

**FISHING:**—Gasconade river and lesser streams afford fine bass, trout, goggle-eye and catfish angling. River is largely contributed to by springs which ooze from the mountain sides. Scenery is picturesque and many fishing parties spend summer vacations along the streams. Deer are scarce; wild turkeys, quail and squirrels are plentiful.

**TOWNS:**—Vienna, county seat; Belle, upon the Rock Island railroad, in northeast corner of county; Summerfield; Richey; Brinktown, and Paydown.

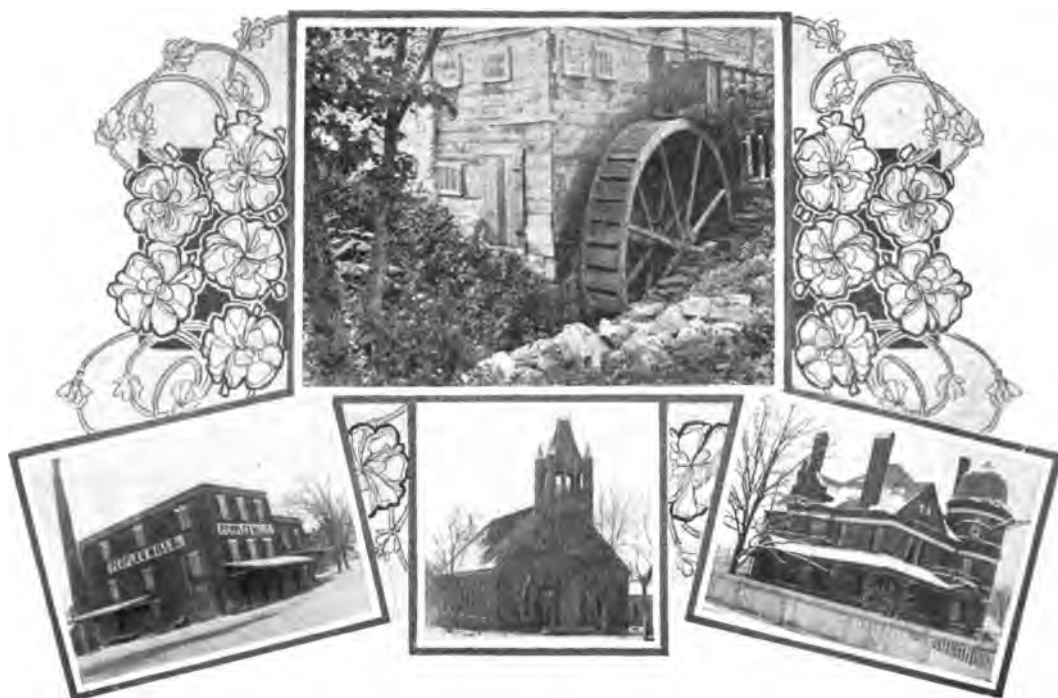
**NEWSPAPERS:**—Vienna: Maries County Gazette, Times; Republican Star.



A MISSOURI FARM HOME.



# MARION



**A**GRICULTURAL endowment, natural mineral resource and proximity to great markets account for Marion county being a felt force in northeast Missouri and surrounding territory. It is situated upon the Mississippi river ninety miles north of St. Louis. At its southern edge is Hannibal, seventh in size among Missouri's cities, and its northeast corner is straightway across the river from Quincy, Illinois. Marion is one of the largest lime and cement manufacturing counties of the State.

The mineral is taken from the abundance of limestone forming the river bluffs. It is also the source of material for the making of rock roads, which contribute so much to modern farming methods largely in vogue in the county. Wholesale lumbering has long been a leading element of trade centering at Hannibal. These yards, receiving lumber by raft from both north and south timber districts, have thus been enabled to undersell market points less favored of transportation and have built up a large business west of the Mississippi river. Burlington railroad shops are located at Hannibal, giving employment to large numbers of men and creating a market for farm produce.

**POPULATION:**—White, 22,974; colored, 3,357; American born, 24,904; foreign born, 1,427; total, 26,331. Farm homes owned, 1,436; rented, 531; other homes owned, 2,013; rented, 2,240; total families, 6,220. The foreign population is German.

**FINANCE:**—County tax: general revenue, 30 cents, county road, 10 cents; court house, 10 cents; special road, 15 cents; school tax, average, 35 cents on one hundred dollars. Total assessed valuation, \$9,553,657; farm property is assessed upon a basis of one-third

MARION COUNTY'S 1902 CROP			
	ACRES	PRODUCT	VALUE
Corn	50,440	2,674,890 *	\$ 815,840
Wheat	17,680	380,120 *	228,070
Oats	4,580	174,080 *	43,520
Hay	28,760	48,800 †	268,895
Forage	1,230	1,435 †	7,175
Clover Seed		400 *	2,640
Grass Seed		650 *	910
Tobacco	20	19,000 †	1,710
Potatoes	555	69,250 *	17,315
Vegetables	565		30,970
<b>Total</b>			<b>\$1,417,045</b>
LIVE STOCK AND PRODUCTS			
KIND	NUMBER		VALUE
Cattle	19,663		\$ 639,045
Horses	8,560		570,665
Mules	1,961		147,075
Asses and Jennets	46		4,600
Sheep	16,580		49,680
Swine	31,683		316,530
Chickens	128,496		
Turkeys	5,234		
Geese	3,402		108,030
Ducks	1,387		
Swarms of Bees	1,556		3,650
Honey	51,867 †		6,485
Wool	60,100 †		10,015
Milk	1,962,332 †		182,320
Butter	354,670 †		
Eggs	935,580 †		116,945
<b>Total</b>			<b>\$2,155,340</b>
* Bushels.	† Pounds.	Dozen.	
† Tons.	§ Gallons.		

Photos in heading: The Old Water Wheel, by R. L. Doherty; People's Mills; Methodist Episcopal Church, South; Residence of Dr. Alonso White, Palmyra.

actual valuation, and town property at 40 per cent basis. County debt, \$100,000; township debt, \$125,000.

**TIMBER:**—There were originally 258,000 acres of timbered land. Species indigenous are: Elm, white oak, hickory, cherry, walnut and hackberry. Sixty-eight thousand acres yet bear timber, generally of small second growth, along the Mississippi river bluffs and the broken land along other streams. A few portable saw mills supply rough plank lumber for local demand.

**MINERALS:**—The Mississippi river bluffs are of limestone formation. Percentages of composition vary. Stone found affords the different mineral substances necessary to Portland cement manufacture, besides in all cases being adaptable to lime making. Hannibal cement works are classed among the foremost in the United States. Lime kilns are also of extensive proportions.

**LAND:**—County area, 420 square miles, 268,800 acres, of which 199,145 acres are in a high state of cultivation. Number of farms, 2,022, of an average size of 132.4 acres; estimated to be worth in aggregate, according to actual selling price, \$7,992,166. Along the Mississippi river the land is broken, but back thereof are rolling lands, part prairie and part cleared timber lands. There are twenty-five to thirty thousand acres of Mississippi river bottom, alluvial soil, and inexhaustible depth. Some of this land occasionally overflows. Twelve thousand acres are protected by levee. Westward are the bluffs, yielding much mineral and also adapted to fruit growing. Uplands west of bluffs embrace four-fifths of the county. Soil is a dark clay loam. Prices are as follows: Bottom lands, average, \$25 an acre; twenty thousand acres of elm land, average, \$80 an acre; thirty thousand acres of creek land, \$40 to \$50 an acre; fifty thousand acres of white oak land, \$30 to \$35. Prairie, \$25 to \$30 an acre.

**MANUFACTORIES:**—Practically all located at Hannibal. Include the mineral working plant, railroad shops, and many factories of less extent.

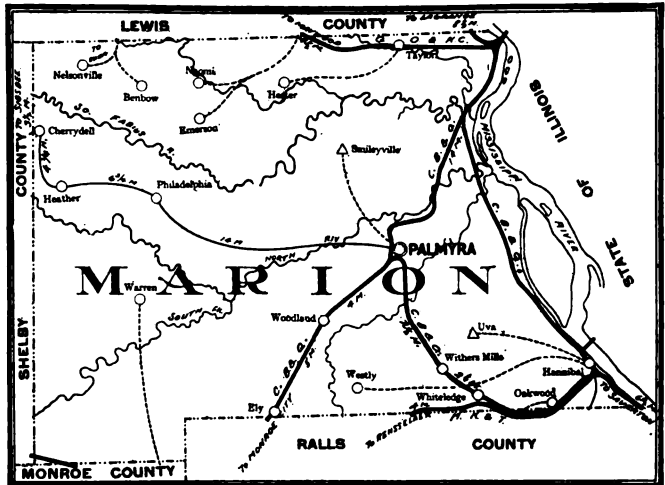
**TRANSPORTATION:**—Hannibal & St. Joseph system operates three divisions within the county, and the Quincy, Omaha & Kansas City comes into the county at the north line, crossing the river to Quincy. There are 100 miles of gravel wagon roads in the county. This mileage is rapidly extending, owing to the availability of limestone material. It is constructed at a cost of only \$800 a mile.

**HIGH SCHOOLS:**—Hannibal and Palmyra each have high schools, work of the former being approved by the State University.

**TOWNS:**—Hannibal, population, 12,-

780; manufacturing, railroad, and distributing center for lumber. Palmyra, county seat, population 2,323, agriculture and live stock. Philadelphia, 211.

**NEWSPAPERS:**—Hannibal: Journal, Courier-Post; Palmyra Spectator, Palmyra Herald.



AT THE SITE OF OLD MARION CITY.



**M**ERCER is fifth in position of the nine Missouri counties which border Iowa. Cattle are the largest source of income. Leading herds of stock cattle are Hereford, and Durham. Princeton, county seat, is headquarters of the Missouri Pure-bred Breeders' Association, and hence a live stock center. Corn is grown in vast quantities, product thereof reaching close to the million mark in dollars. One variety grown was awarded a first premium at Chicago in 1893. Horticulture is successful. There are two orchards of two hundred acres each, and many smaller. Limestone is a natural resource now developing into activity. Quarries are opened along Grand river, south of Princeton, and the Rock Island

railroad has recently established there a rock crusher, giving employment to three hundred men. In matter of telephones, the county is in front rank. A net-work of 537 miles of wire penetrate the four corners; 752 instruments. County contains 484 square miles of land, 309,760 acres, of which 235,774 acres are improved farms. Number of farms, 2,507; average size, 116.4; total estimated valuation, \$7,714,917.

**POPULATION:**—White, 14,648; colored, 58; American born, 14,606; foreign born, 100; total, 14,706. Farm homes owned, 1,790; rented, 306; total families, 3,143.

**FINANCE:**—County tax, 32 cents; school tax, average, 42 cents on one hundred dollars; assessed valuation per cent of real value, 25; total assessed valuation, \$5,014,485; no county debt; no township debt.

**TIMBER:**—One-third of county surface was originally timbered with oak, hickory, ash, elm, walnut, hackberry; seven-tenths of this has been removed. It occurred principally along streams.

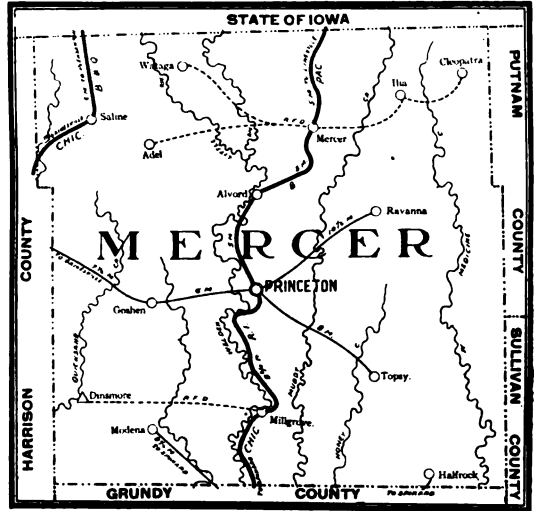
**MINERALS:**—White limestone and coal. Quarries of former are just now attracting first operators. At Princeton a thirty-inch vein of coal is found at a depth of 340 feet. No mines.

**LAND:**—In general direction, numerous streams, Grand river as chief, flow southward through the county. Between these water courses are prairie

MERCER COUNTY'S 1902 CROP			
	ACRES	PRODUCT	VALUE
Corn	66,124	2,644,960 *	\$ 883,160
Wheat	1,674	28,460 *	16,365
Oats	5,206	180,150 *	33,840
Hay	48,192	67,470 †	809,615
Forage	10,444	13,920 †	69,600
Flax	9	90 *	95
Broom Corn	4	2,200 †	60
Clover Seed		25 *	140
Grass Seed		6,900 *	10,695
Tobacco	7	6,300 †	630
Potatoes	709	85,080 *	20,420
Vegetables	990		42,305
<b>Total</b>			<b>\$1,330,925</b>
LIVE STOCK AND PRODUCTS			
KIND	NUMBER		VALUE
Cattle	45,918		\$1,489,115
Horses	10,646		709,735
Mules	1,359		101,925
Asses and Jennets	51		5,100
Sheep	5,826		17,750
Swine	39,472		394,720
Chickens	200,741		
Turkeys	14,407		135,815
Geese	5,457		
Ducks	3,579		
Swarms of Bees	2,666		8,010
Honey	88,867 †		11,110
Wool	22,150 †		3,690
Milk	3,152,170 †		164,880
Butter	506,915 †		
Eggs	989,010 †		123,625
<b>Total</b>			<b>\$3,165,475</b>
* Bushels.	† Pounds.	Dozen.	
† Tons.	§ Gallons.		

Photos in heading: Mercer County Scenes,

ridges, uniformly so, except in the southwest corner where fifty square miles were originally included in one vast forest. What rough land obtains is along streams; very little is untillable; all is capable of blue grass pasture. Land the county over brings \$40 to \$55, reaching \$65 within two miles of Princeton. The little rough land brings \$25 an acre. Grand river bottoms are generally one-half to a mile in width, in most places gently sloping upward into hills reaching an extreme of two hundred feet above their valleys. Largest farms in county are about 600 acres; the smallest, 40 acres. Average farm house is erected at a cost of \$600; many houses cost \$1,500 to \$3,000. Soil is black loam with clay subsoil. On the prairies it ranges in depth from one to three feet; in river and creek bottoms it is often six feet deep.



**MANUFACTURED PRODUCTS:**—Flour, crushed rock railroad ballast and cheese are principal mill products. Cheese factories are located at Ravanna and Saline; rock crusher at Princeton; flouring mills at Princeton and Mercer, and at the latter town is a small woolen mill.

**TRANSPORTATION:**—Two railroads: Rock Island, 24.69; Chicago, Burlington & Quincy, 8.87 miles of taxed roadbed. County roads cross main streams over steel bridges. Roads are dragged.

**SCHOOLS:**—Terms of public schools range from seven to nine months. At Princeton is located a well equipped high school, with laboratories and libraries. It is approved by the University of Missouri.

Drinking water is limestone seepage. Wells are generally twenty to thirty-five feet deep on prairie; ten to fifteen in bottoms.

At Lineville, situated, as its name indicates, upon the Iowa-Missouri line, is a mineral spring of some prominence.

**TOWNS:**—Princeton, county seat, owns waterworks and electric lights. Telephone center of a large area of county. Mercer, Mill Grove, Ravanna, Modena, Half Rock; all supported by farming and live stock.

**NEWSPAPERS:**—Princeton Press, Post, Telegram.



BERRIES, H. E. WYMAN & SON.



**M**ILLER is situated twenty miles southwest of Jefferson City. As a unit the county is mountainous, but includes in the northwestern part an area of tablelands which, together with river bottoms, are location of valuable farms embracing a total of 116,683 acres in cultivation. Timber interests are accredited with the largest single item of export. More railroad ties are loaded at Bagnell, Miller county, than at any other point in Missouri. Large numbers of ties are hauled by wagon to this central market; large numbers come in "drives" down the Osage river from far off points. Extensive pockets of coal are found in Miller. The field has been opened by the Rock Island railroad recently completed between St. Louis and Kansas City. At Aurora Springs lithia water exists. Schools are a feature favorable to immigration. Academies are located at Olean, Iberia, and Spring Garden.

MILLER COUNTY'S 1902 CROP			
	ACRES	PRODUCT	VALUE
Corn	36,627	1,208,890 *	\$ 356,565
Wheat	19,355	358,070 *	196,940
Oats	4,179	135,820 *	35,000
Hay	15,826	23,440 †	140,610
Forage	1,005	1,255 †	6,275
Flax	10	60 *	60
Broom Corn	6	3,000 †	85
Clover Seed		290 †	1,200
Grass Seed		55 *	100
Tobacco	35	24,500 †	2,390
Potatoes	470	47,000 *	15,040
Vegetables	615		20,105
Total			\$785,420
LIVE STOCK AND PRODUCTS			
KIND	NUMBER	VALUE	
Cattle	16,728	\$ 451,655	
Horses	5,465	327,900	
Mules	1,432	93,080	
Asses and Jennets	29	2,610	
Sheep	10,957	32,870	
Swine	24,322	243,230	
Chickens	78,637		
Turkeys	4,985		
Geese	4,599	64,175	
Ducks	2,124		
Swarms of Bees	473	1,190	
Honey	15,767 †	1,970	
Wool	35,480 †	5,970	
Milk	1,318,315 \$	90,340	
Butter	235,352 †		
Eggs	387,540 †	48,440	
Total		\$1,569,370	
* Bushels.	† Pounds.	Dozen.	
† Tons.	\$ Gallons.		

**POPULATION:**—White, 14,995; colored, 192; American born, 14,958; foreign born, 229; total, 15,187. Farm homes owned, 1,700; rented, 587; other homes owned, 339; rented, 373; total families, 2,999.

**FINANCE:**—County tax, 50 cents on one hundred dollars valuation; school tax, average, 44 cents; total assessed valuation, \$2,683,415; one-half actual value; no county nor township debt.

**TIMBER:**—Originally one vast forest. Sixty-five per cent now timbered. Largest year's shipment of railroad ties, 900,000. Hardwood lumber amounts to above nominal aggregate. Black oak represents twenty per cent; white oak of commercial size, five per cent; black jack, thirty-five per cent; post oak, thirty per cent. Hickory is next abundant, and sycamore, elm, maple, and walnut are prominent.

**MINERALS:**—Lead, zinc, coal, iron, glass sand, kaolin, baryta, copper and building stone. Townships of Franklin, Jim Henry, Glaze, Saline and Osage are partially developed. Lead and zinc are found in each. Franklin yields mostly lead and coal, but some zinc; while signs of iron are all over the county, the mining of this mineral is done only in central eastern part. Glass sand of a good grade is found near Eldon, in the northwest. Kaolin occurs eight miles from Eldon and in other less extensive deposits. Baryta is found

extensively in the lead regions. It is exported. Building stone is of high quality. Coal pockets are of a size insuring attention. Coal is especially abundant in western and northwestern portions.

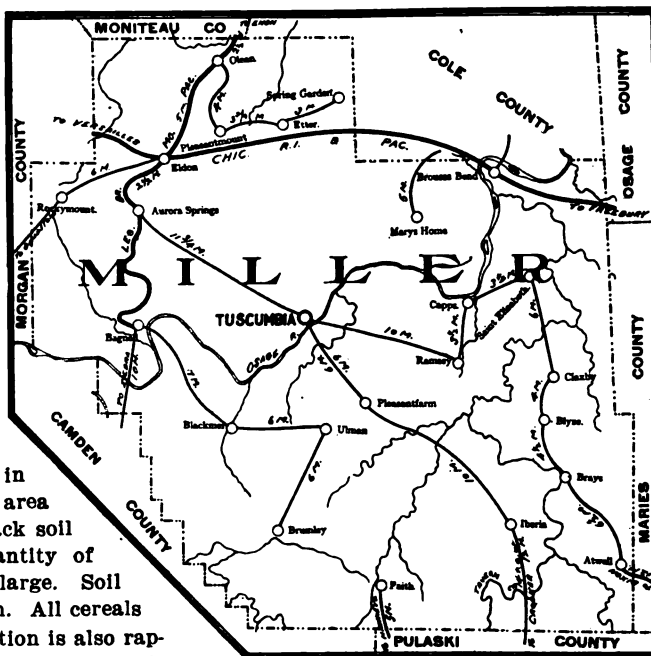
**LAND:**—Area, 590 square miles, equal to 377,600 acres. Farms number 2,251, average size, 123.3, including lands of different descriptions; actual value of farms, \$2,889,820. Improved farming land lies mostly in the northwestern part of county and in valleys of Osage river, Tavern, and Grand Auglaise creeks and tributaries. Bottom land is most productive, but in the northwest, in vicinity of Eldon, there is a large area of tableland where is a deep, black soil of superior fertility. Here quantity of gravel is small; elsewhere it is large. Soil is deeper, since there is no erosion. All cereals and hay are grown here. The section is also rapidly becoming a leading stock center. Roughest land is adjacent to Osage river. Bottoms interlie river and hills. Best of these are valued at \$30 to \$40 an acre. Best uplands sell at \$30 an acre. Improved hill lands are available at \$15 an acre. Undeveloped upland sells at \$6 to \$8. South of Osage river large areas may be had at \$2.50 an acre. Government land to extent of 3,420 acres is subject to homestead entry at \$1.25 an acre. Some of best fruit lands in entire Ozark region are located in Miller. Railroad facilities are also superior. Soil and subsoil are gravelly and porous, and major portion of that part north of river supports a vigorous growth of timber. Very little fruit is now shipped, being consumed locally. Commercial orchards are being planted.

**TRANSPORTATION:**—Rock Island crosses county east and west; Missouri Pacific, Bagnell branch, Jefferson City to Bagnell, runs north and south, intersecting at Eldon.

**LITHIA WELLS:**—Lithia water is abundant from wells at Aurora Springs, a leading health resort of this section. Elsewhere are mineral wells, not improved.

**TOWNS:**—Eldon, railroad division point; location wagon and buggy factory, brick yard, broom factory, flouring mill. Aurora Springs, health resort. Iberia, flouring mill, schools. Olean, flouring mill and canning factory. Tuscumbia, county seat, flouring mill. Spring Garden, school town and farming. Rocky Mount, coal. Bagnell, lumber and tie business. Distillery at Mary's Home.

**NEWSPAPERS:**—Tuscumbia Autogram; Osage Valley Western Preacher; C. M. A. Companion, Olean News, Eldon Advertiser, Blue Ribbon; Eldon Eagle; Iberia Impetus.





**M**ISSISSIPPI county is situated upon the Mississippi river, one hundred and sixty miles south of St. Louis, within the delta district, a leading lumber, alfalfa and cereal growing section of Missouri. It is the most eastern point in the State. Its acreage is 275,000, of which 97,453 acres are in cultivation, producing an annual corn and wheat product worth in excess of one million dollars. Topographically it is level and low-lying, all excepting a one-fifteenth portion immediately to the west and southwest of Charleston, county seat, and it necessitates dike protection from spring floods. Successful levees are bringing about the zenith of timber working and the advancement of agriculture.

**POPULATION:**—White, 9,572; colored, 2,265; American born, 11,687; foreign born, 150; total, 11,837. Farm homes owned, 460; rented, 729; other homes owned, 509; rented, 751; total families, 2,449.

**FINANCE:**—County tax, 50 cents on one hundred dollars; school tax from five cents to 65 cents; average, 50 cents; total assessed valuation, \$3,308,102; county debt, \$25,000; no township debt.

**TIMBER:**—Black and red oak; hickory, cypress, red gumwood, sycamore, cottonwood, walnut of universally large growth. In north portion practically all commercial timber has been removed.

**SAND UNDERSOIL:**—Sand constitutes mineral wealth. Most land is sand underlaid, of high service in drainage.

**LAND:**—Wholly alluvial, level, sand-mixed in varying quantities. So long has the land been formed, sand is in quantity desirable rather than detrimental. Black dirt predominates in the composition. Eighteen thousand acres immediately to the west and southwest of Charleston are prairie. Here is location of highest priced farms. North of the Iron Mountain railroad and west of a line north and south through Samos, farms bring \$40 to \$50 an acre. An occasional tract may be had at \$30. A few surrounding Charleston reach \$80. These farms are finely improved and within a mile of the city. They are characterized by modern improvements, large frame residences, well painted and, being within an unsurpassed grain district, by large barns and live stock. North and east of the railroad which connects Charleston and Belmont, but one-fourth of the area is in actual cultivation, and farms of this locality are generally held at \$25 to \$35 an acre. All the above described land is protected by levee which extends from Big Lake on the north to Wolf Island, almost at the southeastern point of the county. South of the St. Louis & Southwestern and Iron Mountain railroads, which

MISSISSIPPI COUNTY'S 1902 CROP			
	ACRES	PRODUCT	VALUE
Corn	47,414	1,612,076 *	\$ 694,530
Wheat	33,415	768,550 *	453,145
Oats	176	5,280 *	1,760
Hay	2,439	3,660 †	45,750
Forage	2,030	2,370 †	11,850
Cotton	40 †	13,900 †	1,020
Tobacco	1	710 †	70
Potatoes	273	31,125 *	16,380
Vegetables	685		22,980
Total			\$1,157,795
LIVE STOCK AND PRODUCTS			
KIND	NUMBER	VALUE	
Cattle	8,961	\$ 201,622	
Horses	1,934	116,010	
Mules	3,260	228,200	
Asses and Jennets	25	2,250	
Sheep	132	396	
Swine	21,755	217,550	
Chickens	45,395		
Turkeys	1,573		
Geese	2,907	26,630	
Ducks	3,418		
Swarms of Bees	867	1,702	
Honey	28,900 †	3,613	
Wool	660	110	
Milk	771,680 †	72,500	
Butter	135,564 †		
Eggs	171,330 †	21,420	
Total		\$862,083	
* Bushels.	† Pounds.	Dozen.	
‡ Tons.	§ Gallons.		

Photo in heading: Cultivating Corn, W. L. Lee, Charleston.

intersect at Samos, only one-tenth of the land is actually plowed. This portion is to be had at \$25 to \$35 an acre. Soil is black sandy loam, of surpassing fertility, but farm improvements are less mention-worthy than those of the northern part of the county. Nine-tenths of this area is unimproved. At short winter and early spring intervals it frequently overflows from inland. From the river it is nearly all protected, and draining ditches are attending now to inland overflow problem. Unimproved land is to be had at \$15 to \$20 an acre. The entire county is destined to corn, wheat, clover, timothy, cowpeas, watermelons and alfalfa. In the south half cotton will be a staple crop.

**MANUFACTURES:**—Flour and timber products. Principal towns have flouring mills up to 150 barrels capacity. Timber products include native lumber, handles, spokes and hoops for barrels.

**TRANSPORTATION:**—Three railroads, two of which are direct lines to St. Louis. Taxed roadbed totals eighty-five miles.

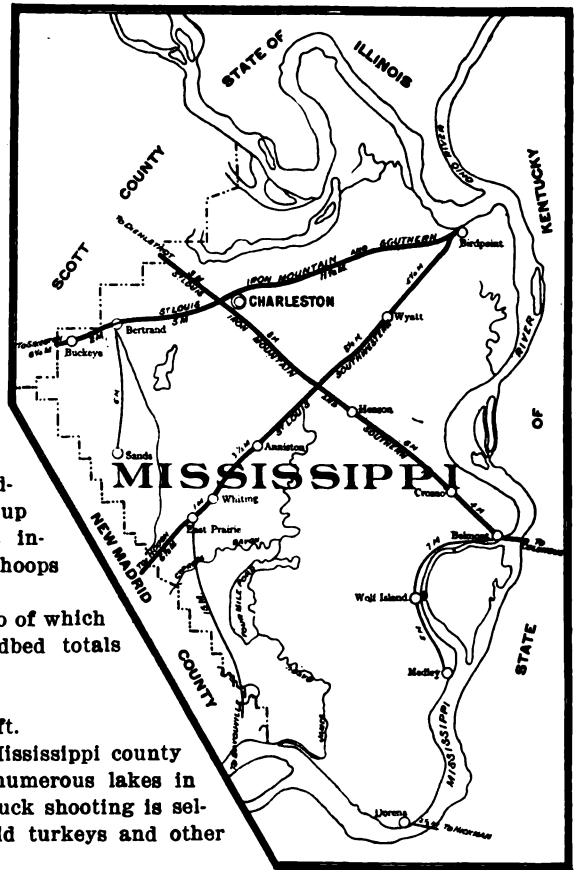
**SCHOOLS:**—Charleston High School.

**WATER:**—Wells are driven. Water soft.

**FISHING:**—Mississippi river bounds Mississippi county on three sides. Big Lake in north and numerous lakes in south abound in river varieties of fish. Duck shooting is seldom paralleled and never surpassed. Wild turkeys and other small game are plentiful.

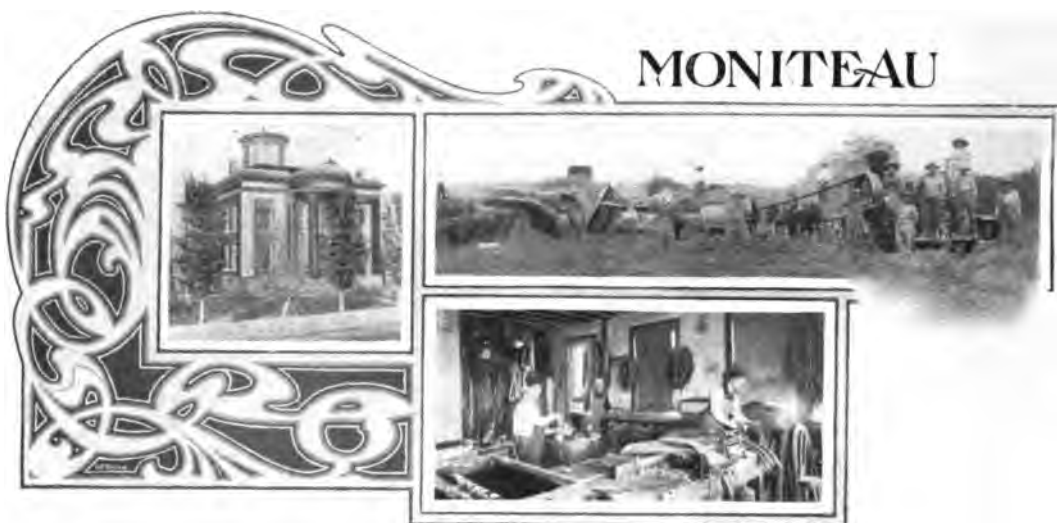
**Towns:**—Charleston, population 1,893; Bertrand, 266; Whiting, 244; Anniston; all supported by timber and agricultural interests. For information address Charleston Commercial Club.

**NEWSPAPERS:**—Charleston Courier, Star, Enterprise.



A FIELD OF COWPEAS.





**S**URROUNDED and intersected by railroads, Moniteau county, washed upon the northeast by the Missouri river and immediately west of the State Capital county; long devoted to general farming and stock raising; is just now swinging into the column of Missouri's coal producing counties. California is the county seat. Superior railroad facilities are accountable, too, though not in whole, for the location here of one of the three largest wholesale harness factories in the State. Poultry raising is a leading and very profitable industry. Milk and butter are shipped daily to St. Louis and Kansas City consumers, reached in from five to three hours respectively. Lead and zinc ores are mined within the county borders. In physical area Moniteau covers 420 square miles of land surface, or 268,800 acres, of which 183,348 acres are under plow. Two thousand one hundred and forty-four farms average in size 119.2 acres each, estimated to be an actual present cash value of \$4,489,013.

MONITEAU COUNTY'S 1902 CROP			
	ACRES	PRODUCT	VALUE
Corn	50,882	2,166,425 *	\$ 639,095
Wheat	30,569	641,945 *	253,070
Oats	9,371	318,615 *	84,430
Hay	23,176	37,080 †	222,480
Forage	2,330	2,310 †	14,550
Flax	28	768 †	170
Broom Corn	22	11,000 †	305
Clover Seed		3,700 *	20,720
Grass Seed		80 *	145
Tobacco	32	22,400 †	2,130
Potatoes	650	81,250 *	26,000
Vegetables	615		30,205
Total			\$1,303,300
LIVE STOCK AND PRODUCTS			
KIND	NUMBER	VALUE	
Cattle	19,601	\$ 589,025	
Horses	6,833	481,180	
Mules	2,801	196,580	
Asses and Jennets	46	4,500	
Sheep	6,349	18,745	
Swine	29,267	292,070	
Chickens	109,329		
Turkeys	4,654		
Geese	4,920	100,920	
Ducks	1,583		
Swarms of Bees	781	1,525	
Honey	30,033 †	3,255	
Wool	26,410 †	4,235	
Milk	1,960,828 †	123,490	
Butter	389,663 †		
Eggs	571,730	71,465	
Total		\$1,587,570	
* Bushels.	† Pounds.	Dozen.	
† Tons.	\$ Gallons.		

**POPULATION:**—White, 15,223; colored, 708; American born, 14,863; foreign born, 1,068; total, 15,931. Farm homes owned, 1,577; rented, 499; other homes owned, 763; rented, 483; total families, 3,322. Foreign population is German.

**FINANCE:**—County tax, 30 cents on one hundred dollars valuation; average school tax, 48 cents; total assessed valuation, \$5,009,523; assessed valuation per cent of actual valuation, 35; county debt, \$10,000; no township debt.

**TIMBER:**—All the oaks, ash, hickory, sycamore, cottonwood and linden were originally found upon the north part of the county's surface. Along the Missouri river the growth was dense and of large size individually. The commercial size trees are practically all gone, save where preserved for pasture shade. Along the river bluffs, however, still remain some scattering trees two or three feet in diameter.

**MINERALS:**—Lead and zinc and coal are mined. The first two are produced from mines located at Fortuna, upon the Versailles-Tipton branch of the Missouri Pacific railroad. Coal deposits of remarkable depth exist throughout this section. One near California is eighteen feet thick, at a depth of sixty feet. Twenty-five years ago a number of isolated deposits were worked and were then thought to have been exhausted. Recent findings refute this. Upon Osage river, in the

Photos in heading: Courthouse; Threshing Scene in Moniteau County; Harness Factory, California.

south part of the county, and Saline creek, in the north, limestone is found, though not sawed.

**LAND:**—Physically, Moniteau is one of the curiously shaped counties of Missouri. The Missouri river cuts off what would else be its northeast corner, and, for some reason, the southwest corner is shaped to match in parallel. Beginning at the river, a generous strip of bottom is encountered and then the bluffs, narrow, high, gradually softening on the west into a hilly surface, until is reached the main line of the Missouri Pacific railway, which divides the county in two. Here is where originally grew the timber. Soil is black accretion in bottoms and brown loam loess upon the bluffs. The balance of the county is a red limestone clay, more or less flinty. South of the railroad the land lays level; an undulating prairie. It grows grass to perfection, accounting for a hay surplus of a quarter million dollars worth annually. Farms in hills sell at \$30 to \$35 an acre; those in prairie one-half of county, at \$25 to \$30.

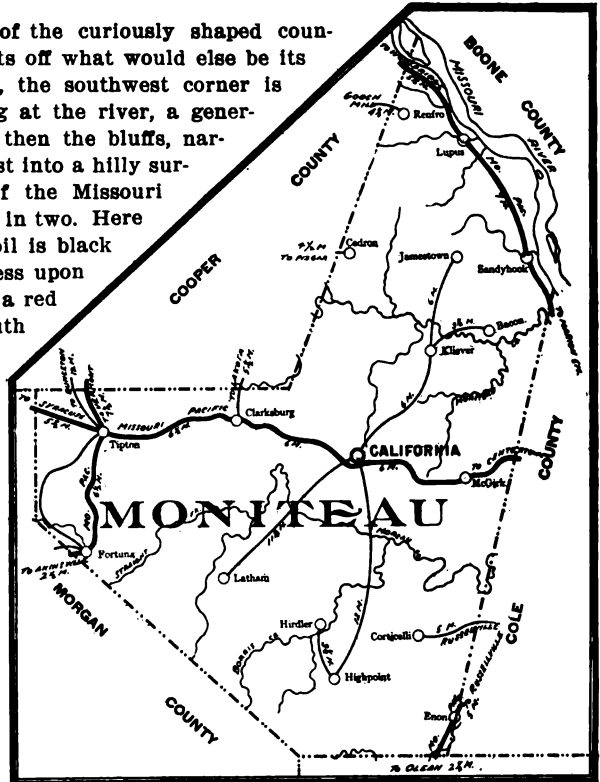
**FRUIT:**—Nowhere are to be found better fruit growing adaptabilities than in the loess bluffs and adjacent hills. These bluffs are of formation favorable to tree growth, and alongside of this is railroad, putting the orchardist within a few hours of St. Louis and Kansas City markets.

**MANUFACTORIES:**—Wholesale harness factory at California; a tannery and woolen mills are the chief manufacturing interests.

**TRANSPORTATION:**—Missouri Pacific has four divisions intersecting the county: Main line from Kansas City to St. Louis crosses in the center, east and west; River Route, following the river bluffs on the north side of county; Versailles branch from Tipton south; Bagnell branch, crossing southeast corner.

**TOWNS:**—California, population 2,181; location of factories, county seat. Tipton, population 1,337. Clarksburg, 509; Jamestown, 344. All these towns derive principal support from general farming and live stock interests.

**NEWSPAPERS:**—California: Democrat, Dispatch, Herald; Tipton Times-Gazette, Mail; Clarksburg Review; Jamestown Journal; Fortuna Record.



CALIFORNIA OPERA HOUSE.

# MONROE



**F**OR every acre of farm land—of whatsoever character—in Monroe county there was an aggregate last year of \$14.95 worth of farm products. Monroe is situated twenty miles west of the Mississippi river and is the third county north of the Missouri. Corn, cattle, horses, mules, hogs and hay are the leading products. Aside from large contribution to material wealth, Monroe is an important factor in other, higher interests. Its schools rank among the best in Missouri. Literature and music are fostered. There is marked culture and the lustre of its intellectual products has gilded wider borders than the State. Mark Twain was born here.

**POPULATION:**—White, 18,108; colored, 1,608; American born, 19,483; foreign born, 233; total, 19,716. Farm homes owned 2,323; rented, 811; other homes owned, 694; rented, 582; total families, 4,410.

**FINANCE:**—County tax average 30 cents on one hundred dollars valuation; total assessed valuation, \$7,172,439; assessment based upon one-third actual valuation; no county debt; no township debt.

**TIMBER:**—Originally one-half of the county was timbered with the various oaks, hickory, walnut, elm, ash, maple and other less numerous varieties. One-half of the timber was found along the bottom lands of the streams. Here it was exceedingly dense and of immense individual growth. In the hills it was lighter, though of growth indicating fertility of soil beyond the ordinary. Timber in the bottoms has been removed; in the hills is yet found commercial quantities.

**MINERALS:**—Coal and limestone. Two veins of coal underlie the county. One is within a few feet of the surface and is worked in numerous places. At Paris this vein is about eighteen inches thick. The deeper stratum is unworked. It is claimed to be eight feet thick in some places. The annual production of coal for the county is approximately two thousand tons. Limestone for rough purposes is found abundantly along all streams.

**LAND:**—Monroe county contains 644 square miles of surface, 412,160 acres, of which 331,911 acres are in a high state of cultivation, devoted principally to corn. One-half the county is a high, level-lying prairie and the remainder is hill land. There are 3,217 farms, embracing on the average 126 acres each. By actual

MONROE COUNTY'S 1902 CROP			
	ACRES	PRODUCT	VALUE
Corn	106,425	5,321,150 *	\$1,622,950
Wheat	9,500	218,750 *	128,250
Oats	8,825	286,845 *	71,710
Hay	49,360	83,910 †	419,550
Forage	48,000	5,600 †	28,000
Flax	10	75 *	75
Broom Corn	18	9,000 †	250
Clover Seed		10 *	65
Grass Seed		9,000 *	12,000
Tobacco	51	48,450 †	4,380
Potatoes	665	78,720 *	19,680
Vegetables	940		55,665
Total			\$2,363,156
LIVE STOCK AND PRODUCTS			
KIND	NUMBER	VALUE	
Cattle	37,689	\$1,224,890	
Horses	14,086	939,065	
Mules	4,919	368,925	
Asses and Jennets	290	29,000	
Sheep	48,577	145,730	
Swine	48,960	489,500	
Chickens	180,505		
Turkeys	8,225		
Geese	8,183	186,400	
Ducks	1,340		
Swarms of Bees	3,714	9,915	
Honey	123,800 †	15,475	
Wool	193,300 †	32,215	
Milk	2,527,296 †	136,030	
Butter	569,629 †		
Eggs	962,980 †	122,865	
Total		\$3,700,010	
* Bushels. † Pounds. ‡ Dozen.			
† Tons. § Gallons.			

Photos in heading: Some of Monroe County's Prize Winners.

present selling prices, farms are estimated to represent an aggregate worth of \$10,525,470. The prairie land soil is a dark alluvial composition, one to four feet in depth, over clay subsoil. Farms are generally well improved and bring an average price of \$45 an acre. There are perhaps twenty-five farms finely improved, lying close to towns for which would be asked \$75 to \$90 an acre; and a like number of outlying farms to be had at \$30. Three branches of Salt river break into the county from the north, northwest and south, respectively,

and form near the eastern edge a confluence which leaves on a direct course for the Mississippi river. Bottoms along these river branches are from a few yards to a half a mile in width. They unite in claiming one-fifth of the county area. The soil is alluvial, black, fertile. The land occasionally overflows, but never suffers thereby. It is seldom found without some bluff land adjunct and hence may be had at \$40 an acre. Three-tenths of Monroe county is rough timber land, ranging in price from \$25 to \$30 an acre. It is never too rough for pasture or fruit. Upon this character of land are found the best orchards of the county.

**MANUFACTURES:**—They are of a character incident to agriculture and stock raising. A great many sheep are raised, hence the location at Paris of a woolen mill of local capacity. A few flouring mills are also found.

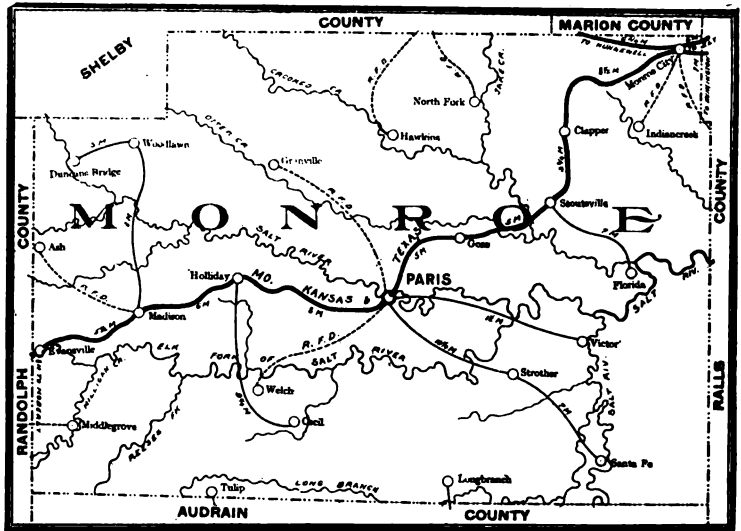
**TRANSPORTATION:**—Missouri, Kansas & Texas railroad crosses from east to west. The Burlington route also touches the county at the northeast corner.

**SCHOOLS AND SCHOOL FUND:**—Monroe county has a perpetual school fund of \$125,000 loaned at six per cent interest. There are three high schools, at Paris, Monroe City and Madison. The first two are articulated with the State University.

**CHURCHES:**—All Christian denominations are represented. Christian and Baptist churches are strongest in membership. Indian Creek township is composed of Catholics.

**TELEPHONE:**—Every farm house has privilege of telephone connection with a subscription embracing almost the entire county.

**NEWSPAPERS:**—Paris Mercury, Paris Appeal; Monroe City: News, Democrat; Madison Times; Stoutsville Banner.





**M**ONTGOMERY is situated upon the north side of the Missouri river seventy miles west of the city of St. Louis. Three-fifths of the county is topographically of that level prairie which distinguishes northeast Missouri. Live stock and general agriculture form the base stone of county commerce. Corn is king. It feeds two million dollars' worth of home live stock while the annual wheat production amounts to nearly 400,000 bushels. Mining of coal and fire clay, mineral paint substance, and the glass and sand industry upon the Missouri river are also among the more important industrial interests. There are two direct railroads into St. Louis, affording excellent transportation facilities. Mineola Springs is a summer resort, for years patronized by local people, and now receiving notice from wider territory.

**POPULATION:**—White, 15,160; colored, 1,411; American born 15,869; foreign born, 702; total, 16,571. Farm homes owned, 1,646; rented, 596; other homes owned, 766; rented, 577; total families, 3,585.

**FINANCE:**—County tax, 50 cents on one hundred dollars; school tax from 10 cents to \$1.10; average, 48 cents; total assessed valuation, \$5,129,679; assessment valuation based upon fifty per cent of actual worth of property. No indebtedness.

**TIMBER:**—Walnut, hickory, white oak, burr oak, sycamore, hackberry, elm, ash, and sugar maple were the most numerous species of a timber growth which primevally covered forty per cent of the county. It grew chiefly along the Missouri river and Loutre river.

**MINERALS:**—There are several coal mines in vicinity of Wellsville. Vein is reached at a depth of one hundred and twenty feet. Mines are worked only during winter season, outputting last year 2,400 tons, locally consumed. At High Hill, upon the Wabash railroad, clay is mined. It is of diverse compositions. Some of it is utilized in the manufacture of tiling, fire brick and pressed brick. Sand for glass manufacture is taken from the river in the south end of the county. A substance from which mineral paint is made is contributing to the mineral output. Zinc prospects exist in the rough lands in the south part of the county. Building stone is plentiful along all streams.

MONTGOMERY COUNTY'S 1902 CROP			
	ACRES	PRODUCT	VALUE
Corn	77,205	3,101,955 *	\$ 946,095
Wheat	16,725	367,950 *	230,770
Oats	14,780	443,370 *	110,845
Hay	26,035	39,050 †	214,775
Forage	1,545	1,800 †	9,000
Flax		1,100 *	1,165
Broom Corn	150	14,000 †	385
Clover Seed	28	250 *	1,650
Grass Seed		280 *	365
Tobacco	35	33,250 †	2,995
Potatoes	610	85,400 *	21,350
Vegetables	705		49,400
Total			\$ 1,578,795
LIVE STOCK AND PRODUCTS			
KIND	NUMBER	VALUE	
Cattle	23,005	\$ 747,660	
Horses	7,779	318,600	
Mules	2,572	192,900	
Asses and Jennets	104	10,400	
Sheep	12,200	36,600	
Swine	40,341	408,410	
Chickens	182,698		
Turkeys	5,156		
Geese	8,615	130,275	
Ducks	1,464		
Swarms of Bees	1,986	6,050	
Honey	64,533 †	8,065	
Wool	44,300 †	7,365	
Milk	1,904,248 †	108,175	
Butter	848,451 †		
Eggs	708,350 †	87,930	
Total		\$ 2,062,430	
* Bushels.	† Pounds.	Dozen.	
† Tons.	‡ Gallons.		

Photos in heading: Herefords, L. D. Mudd, Bellflower; Balance Rock, near Danville.

**LAND:**—The soil map in this volume shows sixty per cent of Montgomery's soil to be that which is found upon northeast Missouri level prairie. It is mulatto loam, one to four feet deep. Blue grass is of spontaneous growth. The south portion of the county is red limestone clay, moderately flinty, indicating mineral deposit. Immediately adjoining the Missouri river is a narrow strip of alluvium. It is estimated that this portion, plus the bottoms of Loutre river and tributaries, amounts to ten per cent of the county. It sells at \$60 an acre. Ten per cent of the land is of white oak growth and may be had at \$10 an acre; the prairie land, amounting to sixty per cent, may be owned for \$45 an acre. Twenty per cent of the surface is rolling upland, selling at \$45. The cheaper land is of the Ozark border soil notably conducive to the commercial orchard's success. It all grows blue grass.

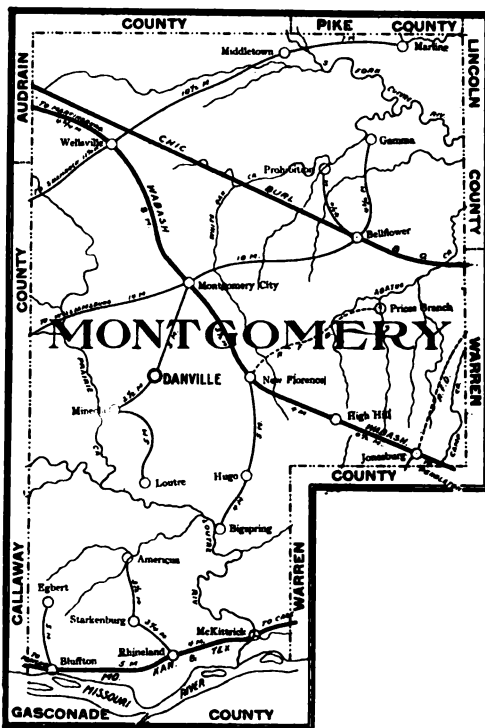
**MANUFACTORIES:**—Flouring mills constitute the manufactories. They are located in the principal towns. Nearly every postoffice point has a feed mill.

**SCHOOLS:**—Montgomery City, Wellsville, New Florence, and Jonesburg have graded school systems. Montgomery City system is headed by a high school, doing approved work. A diploma therefrom admits without examination to the State University.

**HEALTH RESORT:**—Mineola Springs is a picturesque point on Loutre river three miles southwest of Danville. For many years it has afforded place for local summer gatherings, and within the past few seasons its guests have come from out-of-county points as well.

**TOWNS:** Montgomery City, population 2,026, is located near the center of the county, upon the Wabash railroad. Wellsville, population 1,160, is upon the railroad in the northwest corner of the county. New Florence, 424; Jonesburg, 407; Middletown, 375. All are supported wholly by farming and live stock interests. Stock sales are held in all towns. Danville is the county seat.

**NEWSPAPERS:** Montgomery City Standard, Tribune; Wellsville Record, Optic-News; Middletown Chips; New Florence Leader; Jonesburg Journal; Rhineland Sunbeam; Bellflower News.



MINEOLA SPRINGS, PICTURESQUE RESORT ON LOUTRE RIVER.



**C** OAL deposit seventy-two feet thick is the substantiated boast of Morgan county. North of a center line land is of undulating lay, of high farming value. South thereof it is rough and rock covered. Morgan is second county south of the Missouri river and the fourth east of the Kansas line. Coal underlies, east to west, a large area through the center. Scientific and practical investigations reveal pockets of bituminous coal twenty-one to seventy-two feet thick, the latter record belonging to the Stover coal bank between Versailles and Eldon. Drift is entered with wagon and team, mineral loaded, outfit turned 'round and driven out. The new Rock Island railroad, St. Louis to Kansas City, opens this heretofore dormant district. Fire clay, kaolin, and other clays exist in large extent. Cattle, horses and mules demand chief attention of farming section. County area, 638 square miles; 408,320 acres; 139,649 acres cultivated. Number of farms, 2,013; 132.9 acres average size; estimated actual aggregate value \$3,853,410.

MORGAN COUNTY'S 1902 CROP			
	ACRES	PRODUCT	VALUE
Corn	46,292	1,504,490 *	\$ 443,825
Wheat	13,160	289,720 *	159,346
Oats	5,476	197,135 *	52,240
Hay	19,348	29,075 †	159,915
Forage	4,175	5,220 †	26,100
Flax	140	840 *	865
Broom Corn	106	53,000 †	1,460
Clover Seed		310 *	1,735
Grass Seed		600 *	1,080
Tobacco	36	25,200 †	2,395
Potatoes	516	61,920 *	19,815
Vegetables	490		24,510
Total			\$893,276
LIVE STOCK AND PRODUCTS			
KIND	NUMBER	VALUE	
Cattle	20,268	\$ 557,360	
Horses	5,979	394,615	
Mules	2,554	177,780	
Asses and Jennets	97	9,700	
Sheep	10,862	32,585	
Swine	19,809	198,000	
Chickens	111,165		
Turkeys	3,548		
Geese	3,822	60,330	
Ducks	994		
Swarms of Bees	600	1,410	
Honey	20,000 †	2,500	
Wool	35,280 †	5,880	
Milk	1,708,906 †		
Butter	293,179 †	107,560	
Eggs	629,440 †	78,680	
Total		\$1,636,490	
* Bushels.	† Pounds.	Dozen.	
† Tons.	‡ Gallons.		

**POPULATION:**—White, 11,737; colored, 438; American born, 11,705; foreign born, 470; total, 12,175. Farm homes owned, 1,510; rented, 500; other homes owned, 245; rented, 251; total families, 2,506. Foreign population German, mainly in northwest.

**FINANCE:**—County tax, \$1.30 on one hundred dollars valuation; school tax, 10 cents to \$1; average, 70 cents; total assessed valuation, \$2,762,800; assessed valuation per cent of actual valuation, 40; county debt, \$124,500, railroad bonds. No township debt.

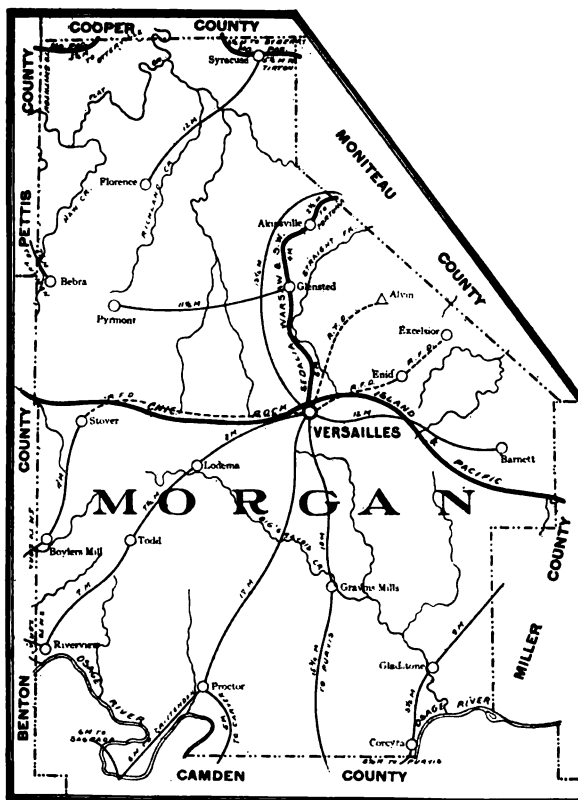
**TIMBER:**—Sixty-five per cent of surface, including south half of county and along streams of north half, was primevally timbered with all varieties and sizes of oak, walnut, hickory, sugar tree, elm, sycamore, in quantities according to precedence in enumeration. Twenty per cent of original timber lands are cleared.

**MINERALS:**—Coal: heretofore used locally and for blacksmithing purposes; field now opened commercially; deposits in pockets ten feet or more below surface. Fire clay and kaolin pits opened at Versailles, where utilizing plant has recently been installed. Lead and zinc findings on surface; no deep prospecting. Iron ore, surface mined, been little exported. Barite and onyx are available.

**LAND:**—Following line crossing county east to west through Versailles, dipping gradually to four or five

Photos in heading: Lead Mining, Morgan County; A Charming Bit of Scenery.

miles' extent to southward upon either side, is the watershed between Missouri and Osage rivers. North of this watershed lies three-fifths of Morgan county, undulating prairie land of fine fertility, the evenness being broken only by friendly creeks which ideally drain. Here are farms, uniformly; good dwellings, woven wire fences, windmills, well stocked with blooded cattle, hogs, horses and sheep. Prices range from \$20 to \$40, with three-fourths worth \$25 to \$35 per acre. These farms are from eighty to three hundred and sixty acres. Within a mile of Versailles, chief town in county, prices reach \$65. Ten per cent of prairie has small surface rock. Of the south two-fifths, only fifteen per cent is improved. Land is mountainous. Best farms are in Osage and Gravois river bottoms; worth \$20 to \$30, with a few asking \$40 an acre. Hill farms, usually containing some creek bottom, are worth \$8 to \$15, according to extent of latter character of land. Eighty-five per cent is wild, timbered land with mineral indication; worth \$6 to \$12. Stock range is free. Bluestem grass and nut crop support live stock ten months a year. Fruit is the ultimate crop of this section.



**CLAY PRODUCTS AND HANDLES:**—Clay of widely diverse character underlies Morgan county. A deposit opened at Versailles is said to possess fire resisting qualities. Kaolin is included. Timbered portions of county supplies Versailles handle factory.

**TRANSPORTATION:**—Rock Island railroad, Kansas City to St. Louis, 26 miles; Missouri Pacific, main line, 7.30; branch, 12.76. Wagon roads include ten miles gravel, in several directions from Versailles.

**CHURCHES:**—Presbyterian, Methodist, Christian, Baptist, Episcopalian, Catholic and German Lutheran are represented at county seat.

**MINERAL WATER; CAVES:**—Water of iron property is bottled at Versailles. Caves abound in south Morgan county. Principal ones are Jacob's, Spears' and Dry Branch.

**NEWSPAPERS:**—Versailles Leader, Statesman, Democrat.







**N**EW MADRID is in the southeast corner of Missouri. Its entire surface is of the lowland type. Originally the county was an unbroken forest, which flooded with the approach of spring. Along the present course of St. Louis, Memphis & Southeastern railroad is a strip of land four to five miles wide, averaging ten feet higher than the balance of the county. Farm settlements started here, and the timber was ruthlessly removed to make room. Balance of the county has furnished hardwood timber to extent of making it foundational to the leading industrial activity. Eight large hardwood lumber mills and countless small ones operate within the county. Sixty-five per cent of land has been cut over; 90,635 acres are under plow. North of New Madrid corn and wheat are leading agricultural products; South thereof, cotton lands. Alfalfa is to become the leading crop. Farming acreage is rapidly increasing. Three drainage ditches, one extending from Morehouse south through Point Pleasant, and two taking same direction and lying between Hough and Laforge, have been constructed. On the west side drainage districts have been organized to build deep ditches north and south, paralleling one mile apart. Cost is to be \$3.50 to \$4 an acre.

**TIMBER:**—Red gumwood, cypress, oak, ash, hickory, walnut, elm, hackberry, sycamore, pecan, cottonwood. Red gumwood is a close imitation of mahogany; is susceptible of high finish. Largely shipped to Europe.

**POPULATION:**—White, 9,253; colored, 2,027; American born, 11,170; foreign born, 110; total, 11,280. Farm homes owned, 303; rented, 787; other homes owned, 514; rented, 609; total families, 2,213.

**FINANCE:**—County tax, 60 cents; school tax, five cents to \$1.25; average, 73 cents; total assessed valuation, \$3,064,101; assessed valuation per cent of actual valuation, 40; no county nor township debt.

**LAND:**—Square miles, 620; acreage, 396,800, of which 90,635 acres are cultivated; number of farms, 1,063; average size, 114.6; estimated actual valuation, \$6,869,145. Underlaid at six to eight feet with sand, serviceable in removing surface water, in manner similar to tiling. A drain divide is described by course of St. Louis, Memphis & Southeastern railroad. It touches towns of Sikeston, Laforge, Lilbourn, New Madrid, Marston and Portageville. Soil is sandy mulatto. Here are best farms, representing one-fifth of the county in acreage; worth \$40 to \$50; in the immediate vicinities of New Madrid and Sikeston, \$60 to \$70. In the lower

NEW MADRID COUNTY'S 1902 CROP			
	ACRES	PRODUCT	VALUE
Corn	47,310	1,419,300 *	\$ 532,235
Wheat	20,155	423,208 *	249,600
Oats	280	8,400 *	2,800
Hay	1,907	2,860 †	37,180
Forage	705	820 †	4,100
Clover Seed		90 *	495
Cotton	5,265	1,842,750 †	138,205
Tobacco	1	710 †	70
Potatoes	112	11,203 *	5,375
Vegetables	210		7,715
Total			\$ 977,865

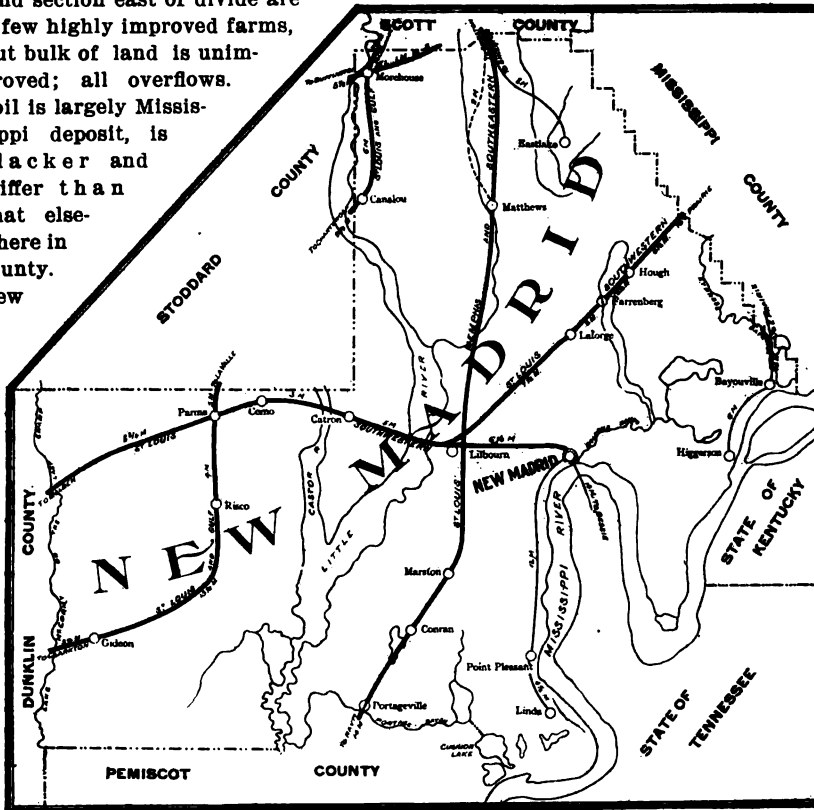
LIVE STOCK AND PRODUCTS		
KIND	NUMBER	VALUE
Cattle	8,067	\$ 181,507
Horses	2,280	136,800
Mules	2,986	209,020
Asses and Jennets	30	2,700
Sheep	612	1,836
Swine	21,955	219,550
Chickens	41,500	
Turkeys	1,483	23,820
Geese	3,202	
Ducks	2,644	
Swarms of Bees	1,643	4,165
Honey	54,787	6,846
Wool	2,355	392
Milk	647,860 \$	53,910
Butter	127,918 †	
Eggs	176,360 †	22,045
Total		\$ 862,561

* Bushels.	† Pounds.	Dozen.
† Tons.	\$ Gallons.	

Photo in heading: New Madrid County Farm Scene.

land section east of divide are a few highly improved farms, but bulk of land is unimproved; all overflows. Soil is largely Mississippi deposit, is blacker and stiffer than that elsewhere in county. Few



improved farms sell at \$25 to \$35; bulk of land unimproved, \$5 to \$10. West lowlands represent one-half of county. Soil is brown deposit, of overflow from hills. Drainage districts covering 160,000 acres exist; proposed to vote \$500,000 bonds, build ditches one mile apart. Money is forthcoming upon bonds due in three years, first payment, twenty-five cents per acre, increasing for twenty years. Cost per acre estimated to average \$3.75. One-fifteenth now drained; cultivable land selling at \$25 to \$35.

**TRANSPORTATION:**—Railroads: Frisco, 25.46; Iron Mountain, 3.67; Cotton Belt, 34.14; branch to New Madrid, 6.90; Frisco (St. Louis, Memphis & Southeastern), 31 miles taxed roadbed. Lee Line steamers, St. Louis to New Orleans, anchor at New Madrid, which is a heavy freight distributing point for surrounding towns.

**DRIVEN WELLS:**—Are the chief mode for obtaining water. Pipe point penetrates sand, giving inexhaustible supply.

**FISH AND GAME:**—Lake Cushion, near Point Pleasant; Lake Como, and Lake Hubbard are bountifully stocked with fish; canals and Mississippi river likewise. Black bass, crappie, rock bass, catfish and perch. Deer, wild turkeys, ducks, quail, rabbits, squirrels and other game. Duck shooting is superb.

**TOWNS:**—New Madrid, county seat, electric lights, two lumber mills, grist mill, stave and heading factory; cotton gin; two white Protestant, one Catholic and two negro churches. Morehouse, hub and spoke factory, two hardwood saw mills employing 300 men; three Protestant churches; Portageville, two saw mills, two cotton gins, two Protestant churches. Point Pleasant, cotton gin and saw mill. Parma, two saw mills.

**NEWSPAPERS:**—New Madrid Weekly Record, Southeast Missourian; Portageville Push.



**N**EWTON, situated upon the Kansas border and separated by McDonald county from Arkansas, is known as the great tripoli county of Missouri, as location of the government fish hatcheries, and as a leading zinc mining district. Its area is 648 square miles. Tripoli mines at Seneca have an annual output of over six and one-half million pounds of product. Zinc, including jack, silicates and dry-bone, yields twenty thousand tons a year. At Granby a mine has been in continuous operation since 1854. A smelter is here located. Other prominent featurizing interests are nurseries, woolen mills, mineral waters, gravel roads, and Grand Falls Park with summer theater and picnic grounds. Horticultural interests are extensive. Near Neosho many strawberries, dewberries, blackberries and raspberries are raised. Elsewhere apples, peaches, grapes, and pears are profitably grown. Apple products average approximately sixteen thousand barrels a year. Strawberries are produced to the extent of twenty-five thousand crates annually. Of the county's 414,720 acres, 193,560 are devoted to agriculture, being under plow. Farms number 3,043, of an average size of 92.1 acres, estimated to be worth at market price, an aggregate of \$8,032,400.

**POPULATION:**—White, 26,280; colored, 721; American born, 26,427; foreign born, 574; total, 27,001. Farm homes owned, 1,917; rented, 1,155; other homes owned, 1,650; rented, 827; total families, 5,549.

**FINANCE:**—County tax, 40 cents on one hundred dollars; school tax from 10 cents to \$1.60; average, 53 cents; total assessed valuation, \$6,417,151; assessed valuation per cent of actual valuation, 50; county debt, \$30,000; no township debt.

**TIMBER:**—Isolated bodies preserved for firewood and general farm purposes. Black oak constitutes sixty per cent of timber. Walnut and hickory are found in valleys. Small growth timber covers about half of the county.

**MINERALS:**—Mineral signs obtain nearly all over the county, but less than one-half have been earnestly prospected. Minerals found are tripoli, zinc, lead, limestone, sandstone, fire clay. Representative annual outputs are: jack, 12,183 tons; silicates, 9,251 tons; dry bone, 198 tons; lead, 3,015 tons, tripoli, 6,660,000 pounds.

**LAND:**—Soil is a dark, fertile, gravelly, clay loam, underlaid by porous subsoil of deep, red or mulatto colored clay. All farm crops thrive. In some of the rougher districts soil is sometimes thin through erosion, and stony bearing. This soil is usually located by its dense growth of black-jack and post oak. Best lands are

NEWTON COUNTY'S 1902 CROP			
	ACRES	PRODUCT	VALUE
Corn	44,443	1,337,290 *	\$ 419,985
Wheat	50,243	880,625 *	488,750
Oats	8,259	218,868 *	58,000
Hay	9,566	16,280 †	113,820
Forage	1,480	1,895 †	9,475
Flax	1,266	5,068 *	5,270
Broom Corn	15	8,250 †	225
Clover Seed		1,020 *	5,710
Grass Seed		250 *	400
Tobacco	18	11,700 †	1,700
Potatoes	1,270	120,650 *	42,280
Vegetables	875		28,630
Total			\$1,184,195
LIVE STOCK AND PRODUCTS			
KIND	NUMBER	VALUE	
Cattle	17,465	\$ 480,290	
Horses	8,505	510,300	
Mules	1,886	121,280	
Asses and Jennets	28	2,520	
Sheep	811	2,435	
Swine	15,360	153,600	
Chickens	147,183 †		
Turkeys	2,348	79,885	
Geese	2,024		
Ducks	3,785		
Swarms of Bees	1,962	4,200	
Honey	65,400 †	8,175	
Wool	2,990 †	500	
Milk	2,572,260 †	164,020	
Butter	540,475 †		
Eggs	1,000,250 †	125,030	
Total		\$1,652,245	
* Bushels.	† Pounds.	Dozen.	
† Tons.	\$ Gallons.		

*Photo in heading: Strawberry Field, near Neosho, which supplies One Hundred and Fifty Car Loads Annually.*

ditches in extreme west and northwest, where water stands generally during January, February and March. Three drainage districts have organized to ditch through central part of county, which will drain practically all now undrained, excepting the extreme northwest. Cost defrayed through taxation system covering twenty years. Settlements are principally surrounding Caruthersville and Hayti and upon waterways. Estimated that less than five per cent of county is waste land. Timber land, representing four-fifths of area, is selling at \$10 to \$20 an acre. One-fifth in cultivation sells at \$30 to \$40. Small acreage of it away from market may be had at \$25; some immediately touching Caruthersville will reach \$100; at Hayti, \$90. Soil is rich, alluvial, seldom containing too much sand. A good farm house costs \$250, made of native lumber. Perhaps 60,000 acres of land are owned by foreign corporations and co-partnerships, holding for sure advance in prices.

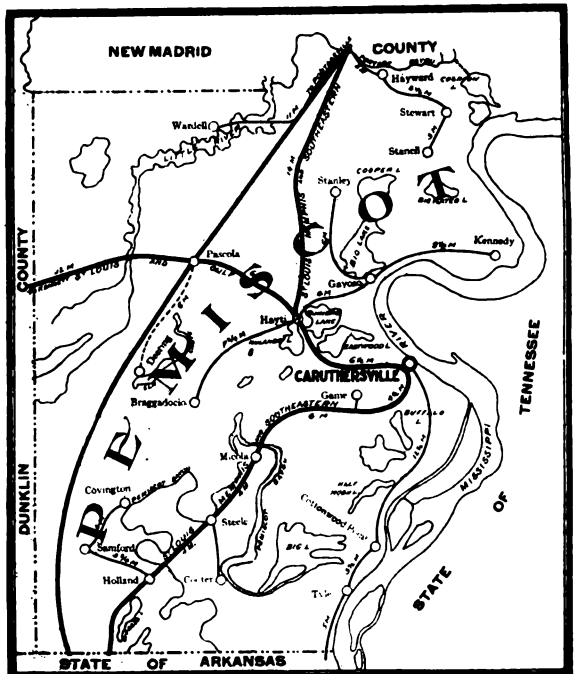
**MANUFACTURES:** Timber and cotton are the basis of manufactures. Timber for hoops, staves, barrel heads and other such interests will be plentiful for twenty years. Much timber is being destroyed in order to make land agriculturally available. At Caruthersville a mill gins cotton and utilizes seeds in oil making.

**TRANSPORTATION:**—Railroads: Frisco control: St. Louis, Memphis & Southwestern, 41.89; St. Louis & Gulf, 25.78 miles. Lee Line Steamers.

**TOWNS:**—Caruthersville, county seat; Baptist, Presbyterian, Methodist, Holiness and Catholic churches; two stave factories; heading plant; planing mill; cotton seed oil mill; money center for saw mills, paying \$100,000 a month; electric lights; ice plant, cold storage, waterworks, wholesale hardware and saddle house; wholesale grocery; annual livestock and agricultural fair. Hayti, railroad junction and division end; mill town, stave factory. Pascola, Holland and Steele are mill towns.

**WATER:**—Wells are driven gaspipe with pump attached. Water is iron flavor. One lake remains, Big Lake at Gayoso, 1,400 acres. Caruthersville Hunting and Fishing Club of 20 years have Big Lake under lease, building club house.

**NEWSPAPERS:**—Caruthersville Press, Democrat; Hayti Argus.



LOG LOADER AT WORK.



**N**ODAWAY is the first cattle county in Missouri. The value of this one live stock item amounts to approximately three million dollars. Besides this large value of cattle, horses, mules and hogs aggregate three and one half millions, and corn products add more than three additional millions. Other important products of the farm in this county are blue grass, timothy, and clover hay, poultry and eggs, butter, and oats. County borders Iowa on the north and is the second east of the Missouri river, separating Missouri from Nebraska; located within the belt of country which makes it purely agricultural.

**POPULATION:**—White, 32,809; colored, 129; American born, 31,680; foreign born, 1,258; total, 32,938. Farm homes owned, 3,002; rented, 1,437; other homes owned, 1,707; rented, 994; total families, 7,130.

**LAND; ITS TOPOGRAPHY AND PRICE:**—Nodaway is a high rolling prairie, with some timbered, rough land along the Nodaway, One Hundred and Two and Platte, the three rivers of the county. There are 848 square miles of land, 542,-

720 acres, of which 486,462 acres are improved. Farms number 4,490, averaging 123.9 acres each, of an actual value of \$18,740,160. Originally stream-bordering, timbered land amounted to one-tenth; two thirds of this has been removed. Soil is an even black prairie loam, ranging generally from two and one-half to four feet deep, especially adapted to cereal production. The river One Hundred and Two, flowing southwardly across the entire county, divides it into two almost equal parts. East of this small stream, the farms average in price \$55 an acre; the cheapest ten per cent are \$40 and a like percentage \$85, elegantly improved. Soil in the western half is similar texture to that of the eastern portion, but of slightly deeper general average. Improvements are also of more pretension. Improved farms average \$75 an acre. The cheapest are \$50; ten per cent of the land brings \$60; bulk ranges from \$70 to \$85. Adjacent Maryville one 100-acre farm recently brought \$150, and around other Nodaway towns land has sold at \$100. Farm improvements are equal to the best in Missouri or Iowa. Average farm residence costs \$1,000. One near Burlington Junction cost \$25,000, and another \$12,000. Five and ten thousand dollar residences are common. Barns are large for live stock feeding and shelter.

**FACTORY PRODUCTS:**—Consist of iron castings for stoves and sash weights, flour, wagons and carriages, brick, tile, cigars, and butter. Maryville wagon factory

*Photos in heading: Scene on Farm of R. T. Lamar, Elmo; Barn of C. D. Bellows, Maryville.*

NODAWAY COUNTY'S 1908 CROP			
	ACRES	PRODUCT	VALUE
Corn	247,194	9,887,760 *	\$ 3,114,645
Wheat	6,684	152,585 *	87,785
Oats	25,938	713,295 *	185,455
Hay	49,877	98,735 †	548,155
Forage	7,125	9,500 †	47,500
Broom Corn	1	550 †	15
Clover Seed		860 *	4,730
Grass Seed		5,700 *	8,835
Tobacco	3	2,700 †	270
Potatoes	2,036	295,220 †	70,855
Vegetables	1,305		69,820
Total			\$ 4,132,515
LIVE STOCK AND PRODUCTS			
KIND	NUMBER		VALUE
Cattle	90,202		\$ 2,931,565
Horses	24,149		1,609,935
Mules	2,906		217,960
Asses and Jennets	65		6,500
Sheep	5,168		17,225
Swine	175,075		1,750,750
Chickens	299,393		
Turkeys	5,445		
Geese	5,705		256,210
Ducks	6,136		
Swarms of Bees	5,286		14,395
Honey	176,300 *		22,025
Wool	22,410 *		8,735
Milk	4,982,620 †		282,225
Butter	909,612 †		
Eggs	1,629,260 †		203,655
Total			\$ 7,316,080
* Bushels.	† Pounds.	Dozen.	
+ Tons.	\$ Gallons.		

builds 75 jobs annually; four cigar factories employ forty men; gas lights are built. Creameries are located at Ravenwood and Hopkins, and canning factory at Parnell.

**TRANSPORTATION:**—Direct lines to St. Joseph, Kansas City, St. Louis, Omaha and Lincoln. Miles of taxable roadbed: Wabash, 45.38; Chicago, Burlington & Quincy: Brownville & Nodaway Valley, 9.76; Kansas City, St. Joseph & Council Bluffs, 12.87; Same, Hopkins branch, 33.69; Chicago, Great Western, 23.75.

**SCHOOLS:** **CONCEPTION COLLEGE:**—One hundred and eighty-six country school buildings. Maryville has system of three ward schools, and central high school approved by University of Missouri.

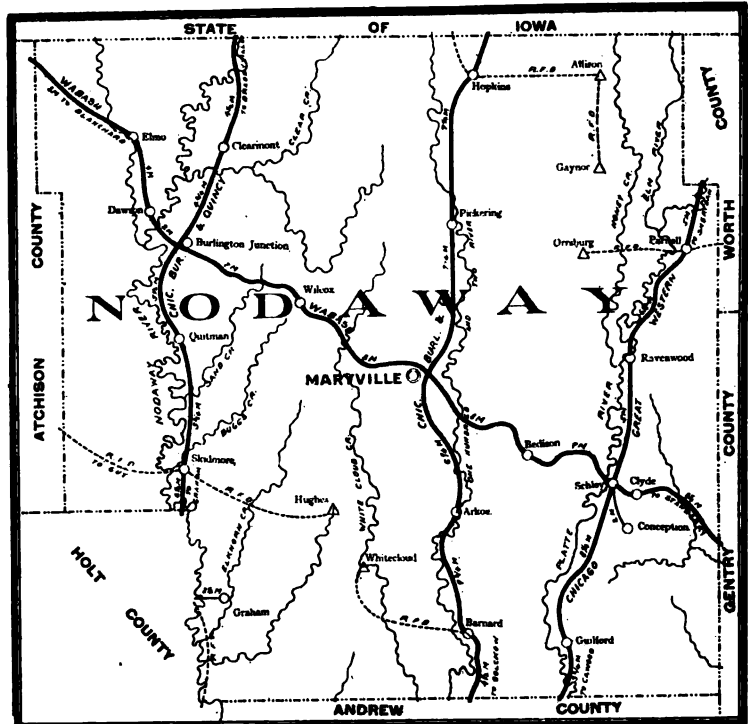
Maryville Seminary, co-educational, founded 1888, preparatory college under Methodist church, North. Academic, business and normal courses; attendance, 155. In 1873 Rev. Frowin Conrad, Benedictine, from Engleberg, Switzerland, founded a monastery at Conception. In 1881 Pope Leo XIII erected it into an abbey, with Father Conrad abbot. In 1884 Conception College was established by Benedictine Sisters, from Switzerland who, in 1875, had founded a convent, later an academy for young women, and in 1890 an orphanage for girls. Monastery numbers 35 priests, ten clerics and 23 lay-brothers. Priests teach in Conception College, which boards 65 pupils and is in charge of 24 parishes and missions in Missouri and among North Dakota Indians. Clerics are preparing for priesthood; lay-brothers work College farm. Seventy-three sisters teach forty orphans and young women in academy, and make vestments for the Catholic church.

**MINERAL SPRINGS:**—At Burlington Junction is a water of mineral properties. A hotel accommodates visitors.

**TOWNS:**—Maryville, county seat, has waterworks, electric lights, sewerage, four miles of vitrified brick street paving. Has fourteen church edifices; in politics about equally divided; two railroads, a Catholic hospital. Skidmore, Hopkins, Burlington Junction, Barnard, are thriving farming towns.

**FINANCE:**—County tax, 65 cents; average school tax, 47 cents; total assessed valuation, \$10,823,245; one-third actual value; no debts.

**NEWSPAPERS:**—Maryville Tribune, Republican, Forum, Democrat; Hopkins Journal, Pickering News, Parnell Sentinel, Ravenwood Gazette, New Conception Herald, Clyde Times, Barnard Bulletin, Burlington Junction Post, Graham Post, Quitman Record, Elmo Register, Clearmont News; Skidmore Standard.





**L**ARGEST peach orchard in Missouri is in Oregon county. It numbers 102,400 trees. Horticulture is the chief pursuit. Peaches, grapes and strawberries are leading exports and acreages are increasing. Agriculture is second. There are 1,880 farms averaging 119.6 acres each, including an average of 46 acres improved. Farm lands estimated at aggregate worth of \$2,508,730. Cattle, hogs, horses, and sheep are pastured on free range. Both pine and hardwood trees are indigenous. Mineral exists. Oregon has the only active gold mine in the State. The county is situated upon the Arkansas border, ninety miles west of the Mississippi river. It is mountainous, three-fourths originally timbered; one-fourth barren land.

**POPULATION:**—White, 13,899; colored, 7; American born, 13,661; foreign born, 245; total, 13,906. Farm homes owned, 1,381; rented, 521; other homes owned, 301; rented, 520; total families, 2,723.

**FINANCE:**—County tax, 50 cents on one hundred dollars; school tax, average, 65 cents; total assessed valuation, \$2,141,046; two thirds of actual valuation; no county debt; no township debt.

**TIMBER:**—North of Eleven Points river, one-half was pine; remainder was white oak, black oak, post oak, hickory and sycamore. South of river hardwoods grew. Pine will be exhausted in six years. One-fifth hardwood timber clean cut or culled. Ten saw mills in county; largest capacity, 25,000 feet daily, located in pine district.

**MINERALS:**—Iron, carbonate of zinc, sandstone, blue limestone, and gold. Carbonate of zinc mines at Alton and Thayer. Stone is not shipped out of county, but several stone business blocks attest its worth. Alpha gold mine, twelve miles east of Alton on Eleven Points river, produced one mill test assaying \$100. Small pieces have assayed \$250 a ton.

**LAND:**—One-fourth "barrens;" bore no timber and surface is high and rolling. Large bulk embraces a strip five miles wide, extending two-thirds across the county, just north of Alton. Here and in valleys are grain farms. Fruit farm district borders Frisco railroad in southwest part of county. Grain farms, improved, are worth \$12 to \$15 an acre. Surrounding Thomasville is a section of valley farms selling at \$50 an acre. Fruit lands with bearing trees are unpriced, since in good fruit years these lands net from \$100 to \$300 an acre. Rough, rock bearing fruit lands, unim-

OREGON COUNTY'S 1902 CROP			
	ACRES	PRODUCT	VALUE
Corn	31,382	1,400,224 *	\$ 376,585
Wheat	15,821	157,210 *	92,755
Oats	3,287	101,900 *	33,965
Hay	4,322	6,485 †	58,365
Forage	845	985 †	4,025
Broom Corn	5	2,500 †	70
Clover Seed		10 *	55
Cotton	895	223,750 †	16,780
Tobacco	50	35,500 †	3,550
Potatoes	307	30,700 *	14,735
Vegetables	785		30,295
Total			\$ 632,080

LIVE STOCK AND PRODUCT		
KIND.	NUMBER	VALUE
Cattle	11,102	\$ 277,550
Horses	3,628	217,680
Mules	1,462	87,720
Asses and Jennets	23	2,070
Sheep	4,677	14,031
Swine	25,201	252,910
Chickens	23,470	
Turkeys	1,305	
Geese	2,443	33,590
Ducks	1,040	
Swarms of Bees	848	2,160
Honey	28,267 †	3,533
Wool	14,400 †	2,400
Milk	1,192,300 \$	
Butter	232,474 †	101,700
Eggs	330,380	41,300
Total		\$ 1,036,644

\* Bushels. † Pounds. || Dozen.  
 † Tons \$ Gallons.

Photos in heading: Peach Blossoms; Picking Peaches, near Koshkonong; A Sample Tasty.

proved within six miles of railroad average \$10 an acre. Farther away sell at \$3 to \$5 an acre. Upland soil is dark red clay mixed with sand, with bright clay subsoil. Bottom land soil is brown, practically the same, but deeper.

**MANUFACTORIES:**—Flouring mills, lumber mills and cotton gins. Flour mills located at Thayer, Myrtle, Boze, Billmore, Surprise, Greer Spring, Koshkonong and Alton. Koshkonong mill has capacity of 100 barrels daily; others are 50 barrels excepting Billmore's, which is 25 barrels. Thayer and Thomasville have lumber mills, former also being

location of planing mill making sash, door, blinds, and pickets. Cotton gins at Couch, Myrtle and Alton. Woolen mill at Alton. Canning factory at Thayer.

**TRANSPORTATION:**—Frisco, Springfield to Memphis, has 13 miles roadbed crossing southwest corner of county. Dirt roads profit from natural gravel upon surface.

**CHURCHES:**—Thayer has six, including Protestant and Catholic; Alton has Baptist, Presbyterian and Methodist; Koshkonong two; Thomasville two.

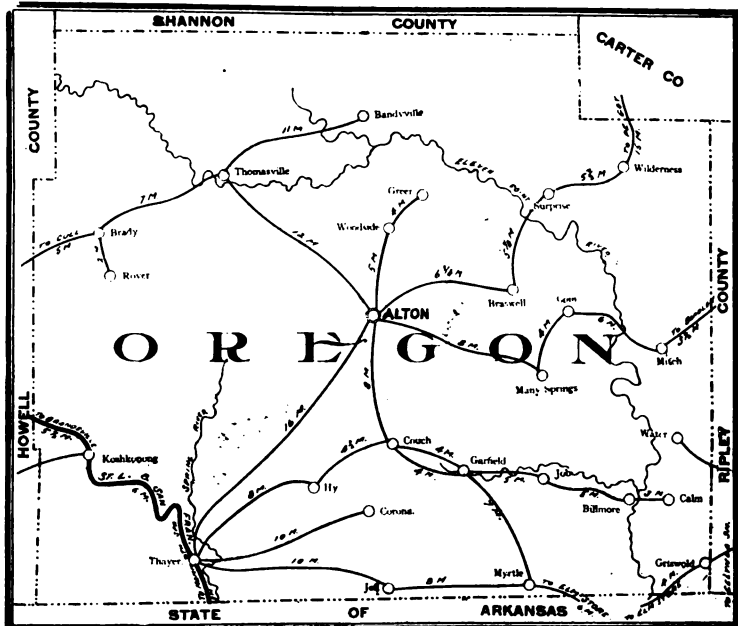
**SCHOOLS:**—Sixty-three districts, seven months' average term. Thayer has well equipped ten room preparatory and high school, laboratory and library; nine months annual term; Alton school has six rooms, eight months' sessions; Thomasville has eight months.

**SPRINGS:**—County is famous therefor. Grand Gulf, a basin 150 feet deep is filled with clear spring water; natural bridge stands in foreground. Spring has connection with Mammoth Springs in Arkansas. Greer Springs and El Dorado Springs are picturesque places where water wells from the earth.

**FISH AND GAME:**—Pike, buffalo, perch, sucker, bass and goggle eye furnish sport. Giggling is popular mode of fishing in clear water of Eleven Points river. Deer, wild turkeys, ducks in season and other small game.

**TOWNS:**—Thayer, railroad division, 400 railroad men live here; electric lights, telephone, city hall, opera house; fruit shipping point. Alton, county seat, farming town; Koshkonong, mill and fruit shipping point; Thomasville, farming district.

**NEWSPAPERS:**—Alton South Missourian, Oregon County Democrat; Thayer: Oregon County Tribune, Thayer Republican; Koshkonong Leader





# OSAGE



**O** SAGE is situated upon the south bank of the Missouri river, ninety miles west of the city of St. Louis. Its surface is uniformly hilly and but thirty-five per cent is cleared of timber. It includes 586 square miles of land area, 375,040 acres, of which 137,186 are in cultivable condition. Farms number 2,022, embracing of land tillable, timbered and for pasture an average of 168.7 acres each, worth in aggregate, \$4,319,078. Chief surplus products are cattle, wheat, corn, horses, and mules, hogs and hay. People are largely native born of foreign parentage. Many farmers have vineyards, from which wine is made for home use and many farm homes are stone or brick, of German architecture.

**POPULATION:**—White, 13,822; colored, 274; American born, 12,770; foreign born, 1,326; total, 14,096. Farm homes owned, 1,638; rented, 405; other homes owned, 356; rented, 271; total families, 2,670.

**FINANCE:**—County tax, 51 cents; school tax, average, 34 cents; assessed valuation, 60 per cent of real valuation. No county debt; no township debt.

**TIMBER:**—Entire acreage was originally timbered. White oak, black oak, scrub oak, black-jack and hickory predominated. Along the streams individual growth of trees was larger, walnut, sugar tree, ash, elm, sycamore and cottonwood. White oak railroad ties and hickory hoops and implement handles are made in small way. Saw mills are portable, in size commensurate with local demands for rough board, hardwood lumber.

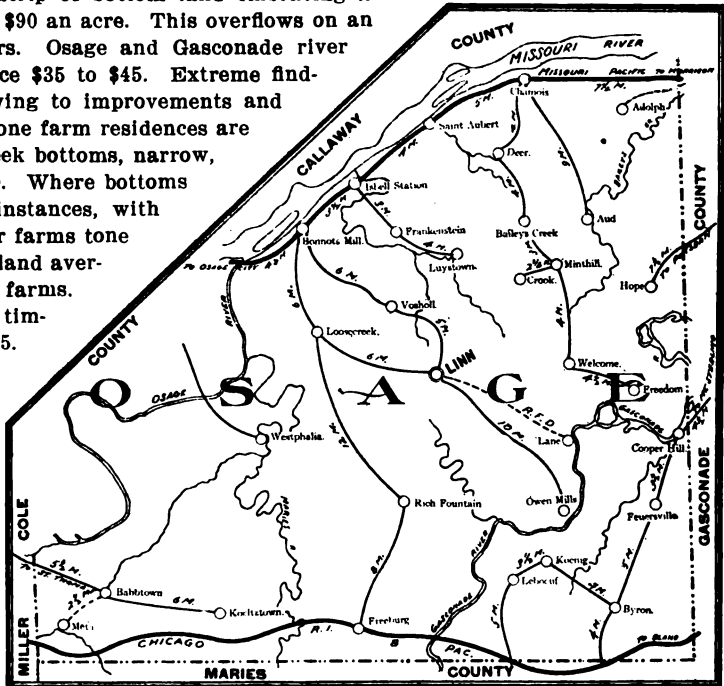
**IRON AND KAOLIN:**—Surface iron ore exists. Car load is occasionally shipped to smelter, but not regularly. Kaolin deposits are found in untouched vastness.

**LAND:**—Surrounded practically upon three sides by the Missouri river and its chief Missouri tributaries, the Osage and the Gasconade rivers, the county is notably hilly, deep cut by the numerous streams emptying into the rivers. Bordering the Missouri river, the hills attain an extreme height of five hundred feet above adjacent valleys. Steep bluffs along Osage and Gasconade rivers reach four hundred feet. These heights diminish toward the center of the county. Sixty-five per cent of the land is unimproved and brings \$2 to \$10 an acre. Tracts are each less than a thousand acres. Along the

OSAGE COUNTY'S 1902 CROP			
	ACRES	PRODUCT	VALUE
Cotton	32,450	1,200,685 *	\$ 354,200
Wheat	41,386	703,560 *	386,960
Oats	3,506	115,700 *	30,660
Hay	14,083	23,960 †	167,720
Forage	155	195 †	975
Broom Corn	1	500 †	15
Clover Seed		1,890 †	10,520
Tobacco	18	12,600 †	1,195
Potatoes	708	81,720 *	27,110
Vegetables	645		33,430
Total			\$1,012,795
LIVE STOCK AND PRODUCTS			
KIND	NUMBER		VALUE
Cattle	17,164		\$ 462,010
Horses	4,622		261,430
Mules	3,323		232,610
Asses and Jennets	34		3,080
Sheep	7,734		23,200
Swine	25,939		239,390
Chickens	126,409		
Turkeys	2,208		
Geese	1,847		51,360
Ducks	1,527		
Swarms of Bees	450		905
Honey	15,000		1,875
Wool	32,300		5,050
Milk	1,101,904 †		80,610
Butter	186,042 †		
Eggs	605,970		75,735
Total			\$1,437,235
* Bushels.	† Pounds.		Dozen.
† Tons.	\$ Gallons.		

Photo in heading: Rollins' Ferry Bridge, Gasconade River, by C. F. Weeks.

Missouri river is a narrow strip of bottom land embracing five thousand acres, worth \$75 to \$90 an acre. This overflows on an average of once in five years. Osage and Gasconade river bottom lands average in price \$35 to \$45. Extreme findings are at \$25 and \$75, owing to improvements and quality of soil. Many fine stone farm residences are located in the county. Creek bottoms, narrow, are worth \$20 to \$30 an acre. Where bottoms are combined, as in most instances, with hill land adjoining, prices for farms tone down to \$10. Improved hill land average, \$15 to \$20 for the best farms. Hill land with commercial timber removed is available at \$5. Soil in hills is light clay, usually rock bearing. The earth texture is favorable to fruit tree growth and wheat. Blue grass grows wild upon pastures. Chief agricultural product of bottoms is corn. Ninety-five per cent of county owned by local people. Five per cent is held by mineral prospectors. Titles are perfect.



Flour, brick and wine are manufactured. Flouring mills are custom capacity, except at Bonnota Mill, which exports flour. Brick and wine are made upon the ground where used.

**RAILROADS:**—Two main lines, St. Louis to Kansas City. Missouri Pacific, 23.83; Rock Island, 26.92 miles of taxable roadbed. A notable feature of county roads is that they represent many miles of gravel, and small streams are crossed on stone culverts, built at county expense. Linn, Bonnota Mill, Loosetown, Chamois, Westphalia are credited with material aid in road building in their respective localities. Small barges and steamboats traffic upon the Osage, Gasconade, and upon the Missouri river from Rocheport to St. Louis. Heavy freight hauling and moonlight excursions make profitable business during the summers.

**FISHING AND HUNTING:**—Many hunting and fishing parties resort along the rivers in season. Catfish, carp, and some game fish are caught; wild turkeys, deer and smaller game are plentiful.

**TOWNS:**—Chamois is the largest; located upon the Missouri Pacific railroad. Linn, county seat, inland town. Bonnota Mill, a French settlement, founded upon the largest flouring mill of the county.

**NEWSPAPERS:**—Linn Unterrified Democrat, Osage County Republican; Chamois: Osage County Enterprise; Meta Herald; Belle Star-Times; Westphalia Volksblatt.



A LOOSE CREEK POOL.

# OZARK



**O**ZARK is on the Arkansas border; the fifth county east of Missouri's west line. The surface is mountainous, embracing 780 square miles, or 499,200 acres. Of this 79,085 acres, chiefly in valleys, are improved farm lands. Farms number 2,029, thus averaging in size 135.7 acres, of an actual value estimated at \$1,281,078.

**POPULATION:**—White, 12,119; colored, 26; American born, 12,098; foreign born, 47; total, 12,145. Farm homes owned, 1,570; rented, 450; other homes owned, 111; rented, 136; total families, 2,266.

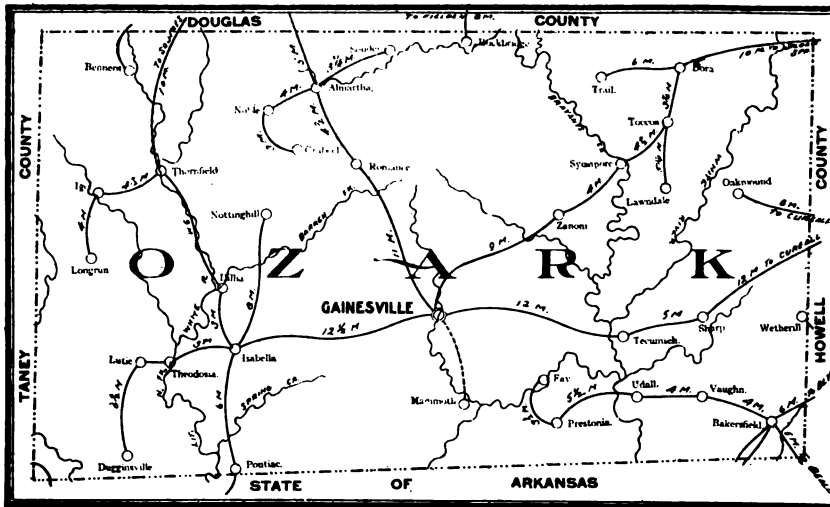
**TIMBER:**—Originally the entire surface was covered with a heavy growth of white oak, black oak, post oak, hickory, black-jack, walnut and pine. Yellow pine was confined to the northeastern one-twentieth portion, where to-day are saw mills at Rockbridge and Trall. Portable mills are also engaged in the pine district, which is as yet little drawn upon. Walnut, which grew upon the valleys, has been largely removed in the land clearing. Other timbers are used only locally. Cordwood is had for the chopping; rough board lumber at 75 cents to \$1 a hundred feet.

**ZINC AND IRON:**—Zinc is mined at Wetherill, location of the Alice Mine, yield of which is hauled by wagon to West Plains. Zinc indications are found at all points. Mineral prospecting is carried on by farmers, whose limited capital forbids extensive or deep search. Iron ore is found upon the surface. Inaccessibility of railroad and cheapness of ore prevents its utilization. Fire clay, lead and sand are other minerals known to exist undeveloped.

**LAND; ITS CHARACTER AND PRICE:**—The Ozark mountains attain greatest heights and most picturesque ruggedness in this section of Missouri. The valleys are of the highest agricultural value. The abundance of blue stem wild grass makes all useful for stock grazing. Ninety per cent can be bought for \$1.25 to \$2.50 per acre. Farms range from \$7.50 to \$10 for the cleared land, averaging \$6 per acre. These are chiefly located adjacent to Lick creek, Big North Fork of White river, Little North Fork of White river, and their tributaries. Everywhere the soil is a dark clay, intermixed with gravel and sand. The land has three altitudes; first the valleys, where the soil is darkest and of alluvial character; secondly, the hillsides leading up

OZARK COUNTY'S 1902 CROP			
	ACRES	PRODUCT	VALUE
Corn	31,539	788,475 *	\$248,370
Wheat	15,031	165,340 *	90,935
Oats	1,809	49,750 *	13,185
Hay	3,180	3,925 †	35,325
Forage	590	705 †	3,525
Broom Corn	8	1,650 †	45
Clover Seed		80 *	450
Grass Seed		70 *	110
Cotton	3,370	943,600 †	66,050
Tobacco	43	27,950 †	2,795
Potatoes	394	39,400 *	13,790
Vegetables	200		12,035
Total			\$486,615
LIVE STOCK AND PRODUCTS			
KIND	NUMBER		VALUE
Cattle	15,463		\$ 386,575
Horses	3,936		296,100
Mules	1,181		70,860
Asses and Jennets	53		4,770
Sheep	7,392		22,175
Swine	22,005		220,050
Chickens	42,651		
Turkeys	1,055		
Geese	2,196		25,180
Ducks	2,481		
Swarms of Bees	358		790
Honey	11,333 †		1,490
Wool	10,400 †		3,235
Milk	1,350,110 †		76,500
Butter	228,643 †		
Eggs	220,070 †		27,510
Total			\$1,075,385
* Bushels.	† Pounds.	Dozen.	
† Tons.	\$ Gallons.		

Photo in heading: From the Highest Point in Gainesville, County Seat.



to table lands, heavily burdened with stone of all sizes and character; thirdly, the table lands, porous and almost free from small rocks; and the rugged mountain tops, stone-bearing and usually heavily timbered. Five hundred thousand acres unfenced range supports live stock nine months a year. In product total cattle, corn, horses and hogs lead; cotton is a leading crop.

**CHURCHES:**—There are fifteen church buildings: Methodist and Christian at Gainesville; Union churches at Bakersfield, Thornfield and Romance. The other edifices are located at various crossroads. Nearly every school house in the county is used for religious service.

**TRANSPORTATION:**—The Frisco railroad touches within twelve miles of the northeast corner and the White River Route Missouri Pacific within eight miles of the southwest corner. Daily mail hack plies between West Plains, on the Frisco railroad, and Gainesville, 47 miles distant.

**SPRINGS:**—Hodson Mill Spring; Double Spring at Lonsdale; Bratton Spring, near Isabella, and Rock Bridge Spring, are among the largest. Creeks are largely supplied by springs of countless numbers.

**MANUFACTORIES:**—Grain mills, cotton gins and saw mills. Flour is made at Gainesville, Lutie, Theodosia, Thornfield, Rockbridge, Dora, Sycamore, and Bakersfield. Cotton gins are at Gainesville, Theodosia, Sycamore; two at Bakersfield and at crossroad postoffices.

**FISH AND GAME:**—Bryant's creek and North Fork of White river afford abundance of jacksalmon, suckers, buffalo, drum, catfish. Wild turkeys, deer, quail, rabbits, squirrels are plentiful, and duck shooting, in season, is unsurpassed.

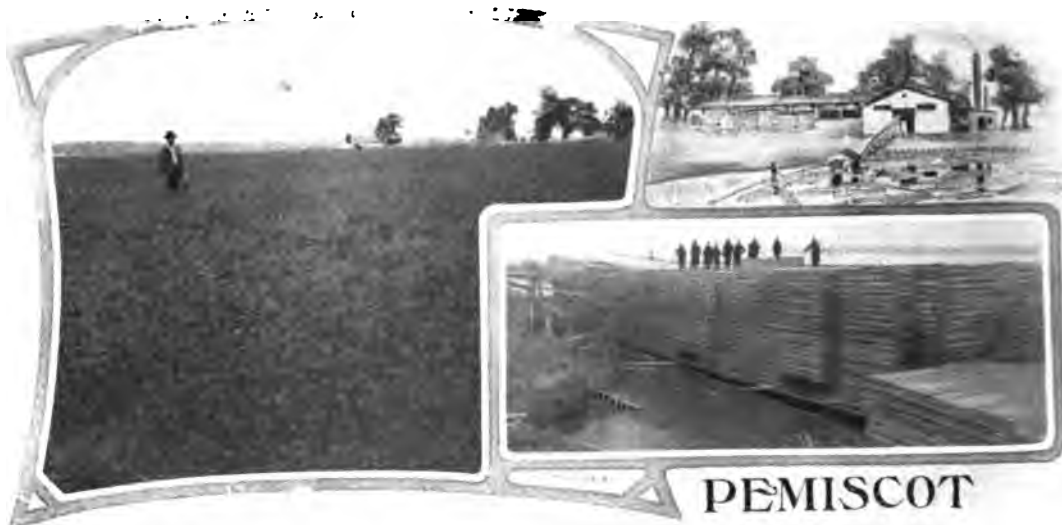
**TOWNS:**—Gainesville, county seat; Bakersfield, Theodosia, are all inland towns, supported by farming.

**FINANCE:**—County tax, 50 cents; school tax, from 25 cents to 50 cents; average, 40 cents; total assessed valuation, \$1,344,273; assessed valuation per cent of real value, 50; county debt, \$500; no township debt.

**NEWSPAPERS:**—Gainesville: Ozark County Times; Ozark County News; Bakersfield Boom-erang.



OZARK COUNTY WATER MILLS.



**M**OST southeastern of Missouri's counties is Pemiscot. It is entirely lowland in character, five-sixths timbered, striding for agricultural position. Soil is alluvial, deposits of the Mississippi river. Individual timber growth is large and forest dense. Cypress trees attain twelve feet in diameter, and cottonwood ten to twelve feet. Lakes existed; within two years the largest of these has been drained and has yielded sixty-five to one hundred bushels of corn to the acre. Alfalfa crop records are more striking. Four to six tons of hay are harvested annually after the first year. Cotton product aggregates a quarter of million dollars annually. Gins, cotton seed oil mills, and timber product plants are of largest proportion. Caruthersville High School is among the best in Missouri. It is approved by the University of Missouri. County contains 480 square miles of surface, 307,200 acres, of which 47,361 are in cultivation. Farms number 1,201, average size 71.5 acres, estimated actual value, \$3,058,897.

**POPULATION:**—White, 11,253; colored, 862; American born, 12,048; foreign born, 67; total 12,115. Farm homes owned, 462; rented, 729; other homes owned, 577; rented, 652; total families, 2,420.

**FINANCE:**—County tax, 50 cents on one hundred dollars; school tax from 10 cents to \$1.30; average, 66 2-3 cents; total assessed valuation, \$3,344,288; 65 per cent of actual valuation; county debt, \$8,000; no township debt.

**TIMBER:**—Sycamore, cottonwood, red gumwood, walnut, ash, red oak, overcup oak, cypress. Four-fifths of acreage has been log cut; twenty thousand acres have been deadened. Estimated that mills are making 250,000 feet of lumber weekly from Pemiscot land. In south of county, east of bayou, where forest was densest, land averaged 8,000 feet cottonwood acre yield. In addition to other timbers. Local mills have capacities of 25,000 to 40,000 feet of soft wood daily.

**LAND:**—Level, protected from river by levee extending along entire river front. To carry away water from hills inland ditches have been constructed west and southwest from a point between Hayward and Stewarts to Elk Chute, thence southwesterly into Little river which flows into St. Francis river. No

PEMISCOT COUNTY'S 1902 CROP			
	ACRES	PRODUCT	VALUE
Corn	25,480	784,400 *	\$ 286,680
Wheat	6,680	112,540 *	66,400
Oats	68	2,175 *	725
Hay	515	900 †	11,250
Forage	440	515 †	2,575
Cotton	8,685	3,256,875 †	144,265
Tobacco	6	4,290 †	425
Potatoes	131	18,100 *	6,290
Vegetables	190		11,170
Total			\$629,750
LIVE STOCK AND PRODUCTS			
KIND	NUMBER		VALUE
Cattle	9,004		\$ 202,590
Horses	1,908		114,180
Mules	2,222		155,540
Asses and Jennets	82		7,380
Sheep	613		1,889
Swine	15,663		166,630
Chickens	72,859		
Turkeys	421		27,395
Geese	2,526		
Ducks	3,370		
Swarms of Bees	775		1,521
Honey	25,832 †		3,229
Wool	2,070 †		345
Milk	810,269 †		73,485
Butter	180,828 †		
Eggs	266,260 †		33,285
Total			\$777,419
* Bushels.	† Pounds.	Dozen.	
† Tons.	\$ Gallons.		

*Photos in heading: Alfalfa, Second Crop, Third Year, Caruthersville; One Hundred and One Car Loads of Lumber on One Raft.*

ditches in extreme west and northwest, where water stands generally during January, February and March. Three drainage districts have organized to ditch through central part of county, which will drain practically all now undrained, excepting the extreme northwest. Cost defrayed through taxation system covering twenty years. Settlements are principally surrounding Caruthersville and Hayti and upon waterways. Estimated that less than five per cent of county is waste land. Timber land, representing four-fifths of area, is selling at \$10 to \$20 an acre. One-fifth in cultivation sells at \$30 to \$40. Small acreage of it away from market may be had at \$25; some immediately touching Caruthersville will reach \$100; at Hayti, \$90. Soil is rich, alluvial, seldom containing too much sand. A good farm house costs \$250, made of native lumber. Perhaps 60,000 acres of land are owned by foreign corporations and co-partnerships, holding for sure advance in prices.

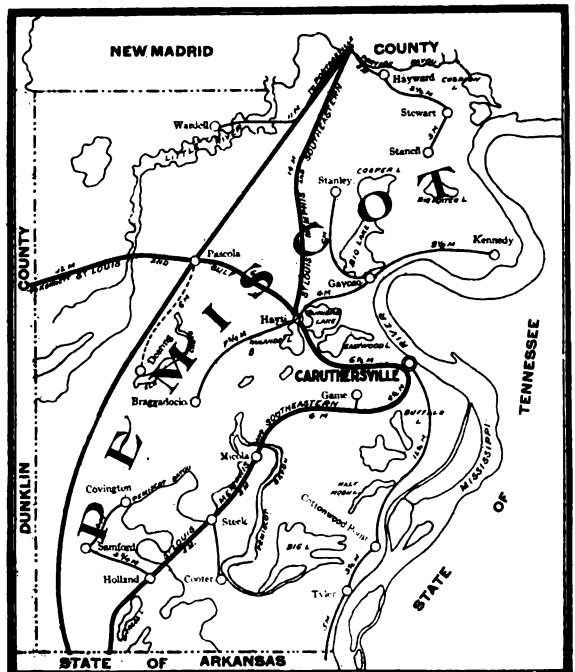
**MANUFACTURES:** Timber and cotton are the basis of manufactures. Timber for hoops, staves, barrel heads and other such interests will be plentiful for twenty years. Much timber is being destroyed in order to make land agriculturally available. At Caruthersville a mill gins cotton and utilizes seeds in oil making.

**TRANSPORTATION:**—Railroads: Frisco control: St. Louis, Memphis & Southwestern, 41.89; St. Louis & Gulf, 25.78 miles. Lee Line Steamers.

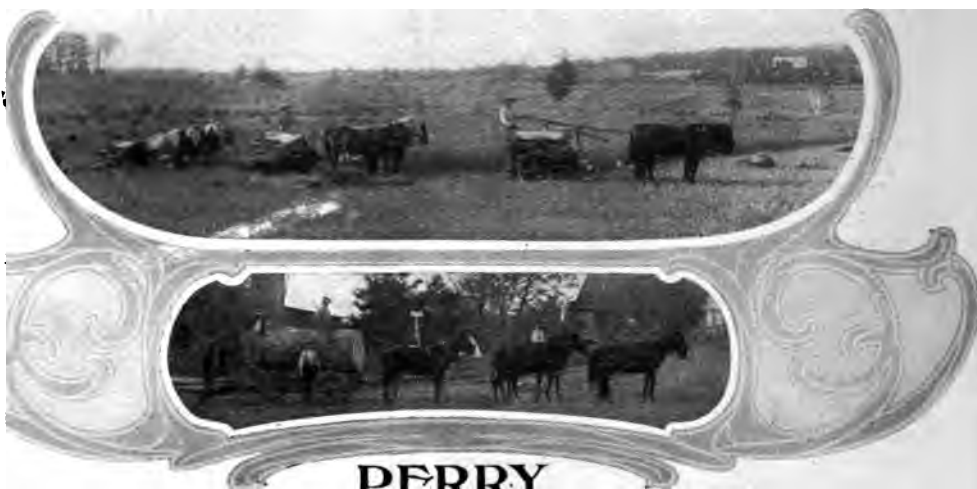
**TOWNS:**—Caruthersville, county seat; Baptist, Presbyterian, Methodist, Holliness and Catholic churches; two stave factories; heading plant; planing mill; cotton seed oil mill; money center for saw mills, paying \$100,000 a month; electric lights; ice plant, cold storage, waterworks, wholesale hardware and saddle house; wholesale grocery; annual livestock and agricultural fair. Hayti, railroad junction and division end; mill town, stave factory. Pascola, Holland and Steele are mill towns.

**WATER:**—Wells are driven gaspipe with pump attached. Water is iron flavor. One lake remains, Big Lake at Gayoso, 1,400 acres. Caruthersville Hunting and Fishing Club of 20 years have Big Lake under lease, building club house.

**NEWSPAPERS:**—Caruthersville Press, Democrat; Hayti Argus.



LOG LOADER AT WORK.



## PERRY

**P**ERRY borders upon the Mississippi river, sixty miles south of the city of St. Louis. Originally its 436 square miles of land surface were one vast forest of oaks and walnut and willow and gum, with an occasional cottonwood tree and eight hundred acres in the south-west largely bearing yellow pine. At the present time 139,945 acres are under cultivation. Agriculture, timber and minerals are bases for county commerce and industrial pursuit. Popcorn growing is an agricultural feature. Corn, wheat, hay, oats and potatoes are leading crops of farms which number 1,936, and are of an average size of 133.9 acres. Estimated actual valuation of farms \$3,629,938. Lithographic stone is a valuable mineral deposit, found in thicknesses varying from two inches to a foot. Eastern edge of Perry county is generally Mississippi river bottom bounded by bluffs. The central portion is

rolling and the west and southeast localities are rough. Silver Lake, situated in the west side of the county, Lithium Spring, in the north and Schenmer mineral springs, in the south, are points frequented by pleasure seekers.

**POPULATION:**—White, 14,694; colored, 440; American born, 14,279; foreign born, 855; total, 15,134. Farm homes owned, 1,496; rented, 429; other homes owned, 590; rented, 389; total families, 2,904.

**FINANCE:**—County tax 37½ cents on one hundred dollars; school tax average 40 cents; total assessed valuation, \$3,308,770; assessed valuation per cent of actual valuation, 40 cents; no county nor township debt.

**TIMBER:**—Black oak, white oak, gumwood, walnut, post oak, hickory, pecan, willow and pine are the timbers indigenous. Present acreage 139,095. Black oak occurs to extent of forty per cent; white oak, twenty per cent; black gum, three per cent; 500 to 1,000 acres of pine.

**MINERALS:**—Lithographing stone, silica, iron, lead, copper, building stone are deposited. Lead mines are found in center of county, near Perryville. Lead indications in eastern and extreme western portions are very promising. County borders on the west the famous southeast Missouri lead mining district. Build-

PERRY COUNTY'S 1902 CROP			
	ACRES	PRODUCT	VALUE
Corn	26,858	872,875 *	\$ 327,330
Wheat	51,919	994,317 *	586,645
Oats	5,019	125,475 *	41,825
Hay	8,889	13,335 †	146,685
Forage	2,385	2,725 †	13,025
Broom Corn	7	3,500 †	95
Clover Seed		1,300 †	7,150
Grass Seed		10 *	20
Tobacco	15	10,650 †	1,065
Potatoes	564	56,400 *	27,070
Vegetables	305		19,050
Total			\$ 1,170,560
LIVE STOCK AND PRODUCTS			
KIND	NUMBER	VALUE	
Cattle	11,158	\$ 278,950	
Horses	4,331	259,880	
Mules	2,517	176,190	
Asses and Jennets	27	2,430	
Sheep	7,651	22,953	
Swine	28,461	284,620	
Chickens	106,208		
Turkeys	2,743	66,965	
Geese	2,940		
Ducks	1,320		
Swarms of Bees	779	1,445	
Honey	25,967 †	3,246	
Wool	35,000 †	5,833	
Milk	1,168,964 †	92,085	
Butter	187,218 †		
Eggs	564,530 †	73,065	
Total		\$ 1,267,642	
* Bushels.	† Pounds.	Dozen.	
† Tons.	‡ Gallons.		

Photo in heading: Perry County Scenes.

ing stone is abundant in central section. Iron was once mined, but operations were discontinued owing to low price of product. Ten miles west of Perryville is a fine ledge of lithographic stone lying in stratified beds. Zinc indications are near Silver Lake.

**LANDS**—There is much more first class farming land in Perry county than is shown in the cultivated acreage. Bottoms are of the traditional Mississippi valley fertility and the uplands extending back from the river bluffs are likewise productive. County in western and south-eastern parts is rugged; the central is rolling. Best im-

proved lands are adjacent to the Mississippi. Best uplands are in the central part in a belt extending north to south. Farms are here well improved. Best improved lands sell at \$75 to \$100 an acre; interior bottom land at \$40 to \$50; best improved uplands in central part also \$40 to \$50; few central section farms may be found at \$25 to \$30. In the southern part improved and unimproved will range from \$8 to \$12; and in the west end and southeast corner from \$1.25 to \$5 an acre. Government land, 461 acres.

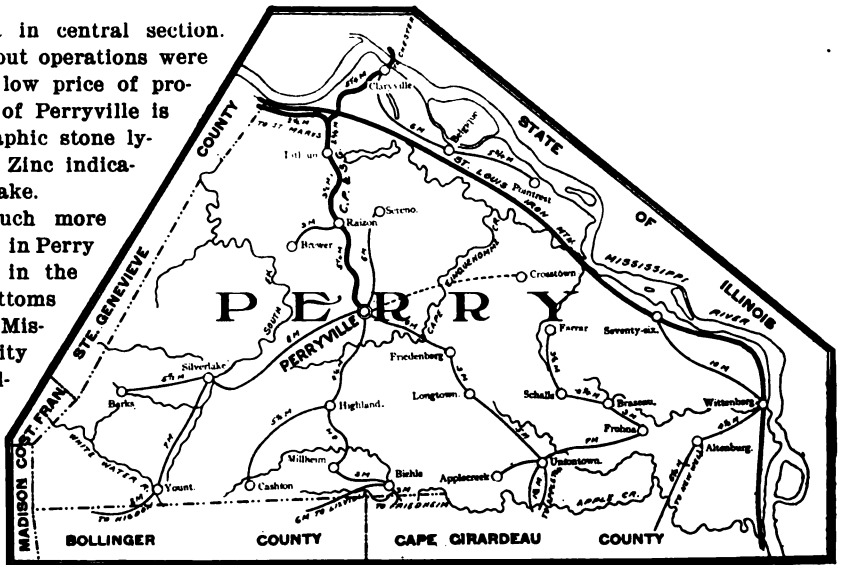
**FRUIT LAND**:—Adaptability of land to fruit growing deserves attention. Practically the entire county may be thus described. Apples, peaches, strawberries, grapes, pears and all small fruits; fine soil; climate and transportation favorable.

**MANUFACTORIES**:—Saw mill, flouring mills, distilleries, carding machines, creameries, brickyards, soda water factory, broom factory, wine press and ice plant.

**TRANSPORTATION**:—Frisco main line, St. Louis to Memphis; Chester, Perryville & Ste. Genevieve, from Perryville to West Chester. Mississippi river traffic in heavy freight is an important item of transportation. There are one hundred miles of gravel roads for wagon.

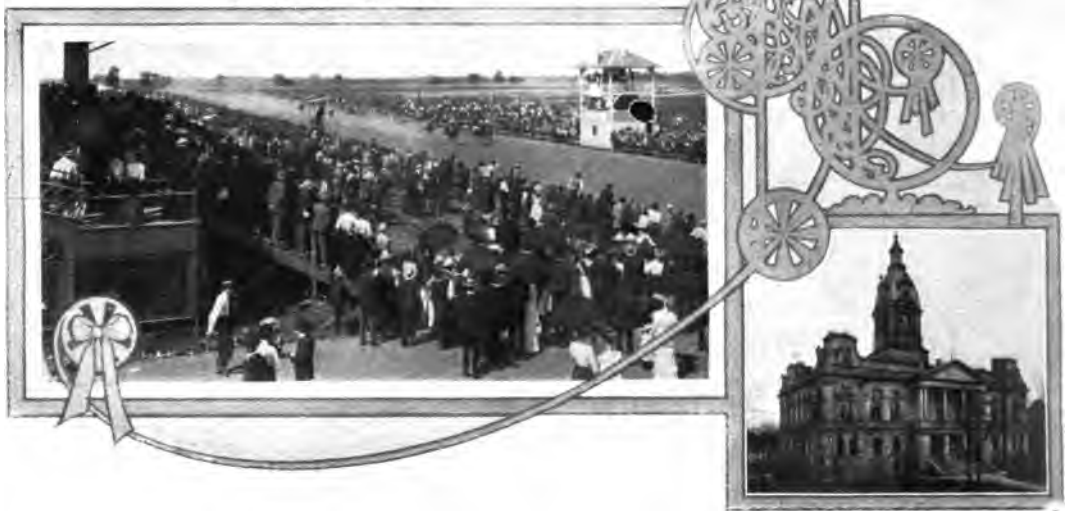
**TOWNS**:—Perryville, county seat, population 1,275; has flouring mill, planing mill, brick and wagon factories and soda water plant; leading interests are agricultural and mining. Altenburg, population 222, has creamery; Claryville, Mississippi boat shipping point; Wittenburg, river shipping point; Longtown, farming; Berryville, farming; Lithium, seat of lithium water well, pleasure resort and agriculture; Silver Lake, Belgique, Crosstown, Brewerville, Brazeau, Frohna, Yount, Uniontown, Serens, Highland, Biehle.

**NEWSPAPERS**:—Perryville: Perry County Sun; Perry County Republican.





# PETTIS



**I**N attest of the resources of Pettis county, twenty miles south of the Missouri river and forty-five miles east of Kansas, Missouri has established within its borders the annual State Fair. Pettis is especially noted for live stock. Some of the best known breeders in the State are here located, where lay of land and soil and transportation and climate are suited to the needs of the stockman. General agriculture claims the county. The leading crop is corn, this product amounting to almost two million dollars' worth annually. Cattle, horses and mules and hogs account for something over two million dollars to the farmers. There are 688 square miles of land, 440,320 acres, of which 344,869 acres are included in improved farms. Land is undulating. Farms number 2,935, of an average size of 139.2 acres,

worth according to actual selling prices, \$13,975,770. Sedalia, chief town and county seat of Pettis county, is a railroad center of prominence and is the location of the shops of the Missouri Pacific railroad.

**POPULATION:**—White, 29,541; colored, 2,897; American born, 30,891; foreign born, 1,547; total, 32,438. Farm homes owned, 1,930; rented, 949; other homes owned, 2,099; rented, 2,142; total families, 7,128.

**FINANCE:**—County tax: general revenue, 60 cents, road tax, 20 cents on one hundred dollars' valuation; school tax, 20 cents to \$1.35, average, 50 cents; total assessed valuation, \$12,226,800; assessed valuation per cent of actual valuation, 50 cents; county debt, \$225,000; no township debt.

**TIMBER:**—Formerly covered in the aggregate 45,000 acres, adjoining the streams and bounding bluffs. There is no commercial timber, excepting for local firewood and rough board purposes. Species found were oak, hickory, walnut, sycamore, elm, cottonwood.

**MINERALS:**—Practically all land is underlaid with limestone, and usually that formation is found within twenty or thirty feet of surface. In the western and northwestern portions coal underlies the surface and these measures bear deposits of shales and fire clays. A few small coal mines supply neighborhood need, but since 1899 no coal has been exported.

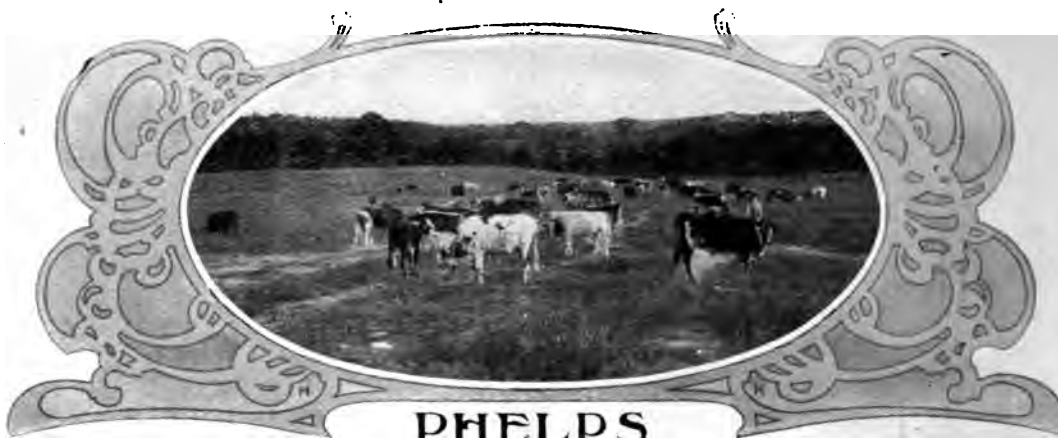
PETTIS COUNTY'S 1903 CROP			
	ACRES	PRODUCT	VALUE
Corn	124,802	5,491,288 *	\$1,915,930
Wheat	27,127	678,175 *	372,946
Oats	9,851	447,795 *	118,635
Hay	40,838	64,860 †	356,730
Forage	5,225	6,530 †	32,650
Flax	3,277	19,662 †	20,656
Broom Corn	319	159,500 †	4,385
Clover Seed		730 *	4,090
Grass Seed		3,900 *	7,026
Tobacco	26	18,200 †	1,730
Potatoes	1,124	146,120 *	46,760
Vegetables	1,450		76,120
<b>Total</b>			<b>\$2,957,130</b>
LIVE STOCK AND PRODUCTS			
KIND	NUMBER	VALUE	
Cattle	39,841	\$1,294,832	
Horses	12,030	793,960	
Mules	3,902	292,650	
Asses and Jennets	155	17,050	
Sheep	6,295	18,835	
Swine	46,620	466,200	
Chickens	163,173		
Turkeys	5,774		
Geese	3,283	142,610	
Ducks	1,990		
Swarms of Bees	1,921	5,600	
Honey	64,033 †	5,005	
Wool	23,760 †	3,960	
Milk	3,016,165 †	246,860	
Butter	503,069 †		
Eggs	934,010 †	116,760	
<b>Total</b>		<b>\$3,409,382</b>	
* Bushels.	† Pounds.	Dozens.	
† Tons.	§ Gallons.		

Photos in heading: At the Missouri State Fair, Sedalia; Pettis County Court House.

**NEWSPAPERS:**—Sedalia: Democrat, Bazoo, Capital, Sentinel, Rosa Pearl's Paper, Journal, Harmony Baptist, Times, Conservator, Ruralist; Lamonte Record; Greenridge Local News; Smithton Sunbeam; Houstonia Spectator.



**LORD PREMIER, 50001, N. H. GENTRY, SEDALIA.**



**T**HE School of Mines and Metallurgy, a department of the University of Missouri, is located at Rolla, county seat of Phelps county. It is the largest institution in the county. Next to this should come farming and then timber employment and mining. The School of Mines offers free tuition in four courses leading to degree of Bachelor of Science, as follows: Mining Engineering; Civil Engineering; Chemistry and Metallurgy; General Science. It affords library of four thousand volumes, covering mines and metallurgy; laboratories and shops in which is complete mining machinery for ore concentration. There are eight buildings: Mining and Metallurgical, Chemical Laboratory, Gymnasium, Club House, Mechanical, and Engineering. Established 1870; student body, 209. Location: Half way between St. Louis and Springfield on St. Louis & San Francisco railroad.

**POPULATION:**—Nearly one-tenth is foreign born and descendant thereof. German settlement at Dillon; French near Dillon, and Italian at Knob View. White, 14,009; colored, 185; American born, 13,270; foreign born, 924; total, 14,194. Farm homes owned, 1,490; rented, 533; other homes owned, 407; rented, 392; total families, 2,822.

**FINANCE:**—County tax, 45 cents; road tax, 20 cents; total, 65 cents; school tax average, 52 cents; total assessed valuation, \$3,170,944; improved lands are assessed at one-third value; wild land at \$1.25 an acre; county debt \$6,000; no township debt.

**TIMBER:**—All but eight thousand acres was a forest of white, black and post oak, black-jack, sycamore, walnut, hickory, wild cherry, and ash. Growth generally less than one foot in diameter. Railroad ties have consumed one-fourth of commercial size white oak. Cord wood, \$2.50; hardwood lumber, \$1.40 per hundred. Mills are all portable.

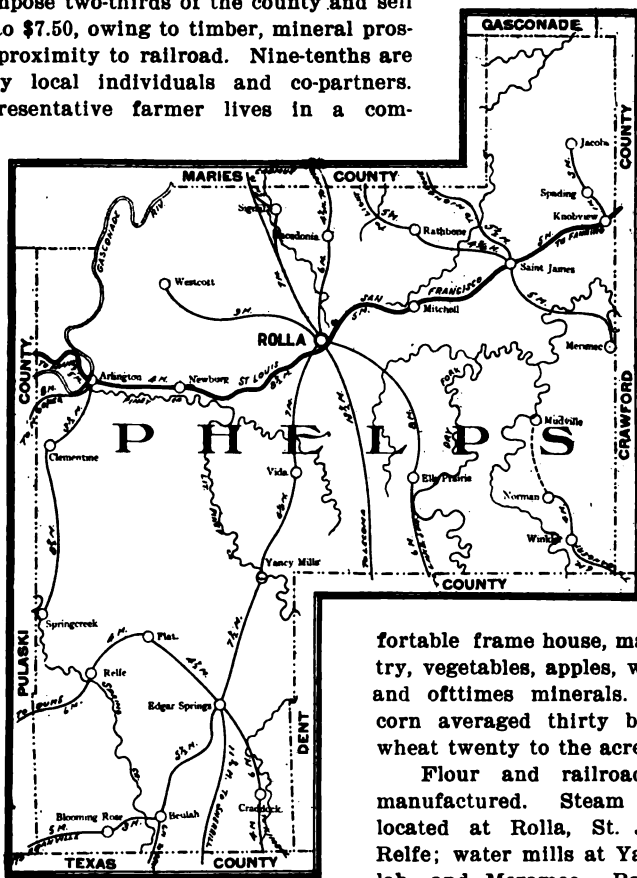
**MINERALS:**—Pyrites of iron, iron ore, tiff and lead have been shipped. Iron ore is abundant in east half; mineral findings have always been pockets. Limestone and sandstone plentiful; unused. Onyx abounds in caves near Newburg. Kaolin, found adjacent to railroad between Rolla and St. James, is only mineral commercially developed. Asphaltum is claimed.

**LAND:**—County area, 640 square miles, 409,600 acres, of which 106,241 are improved. Farms number 2,013; average size, 126.3 acres; aggregate value, \$2,274,100. Free grass range encourages stock growing, hence cattle are the chief farm export. Scarce one-third is under fence. This portion is plow, orchard, and pasture land. Topographically the county is hilly, in some places long, rolling; oftentimes precipitous; but

PHELPS COUNTY'S 1902 CROP			
	ACRES	PRODUCT	VALUE
Corn	29,996	809,880 *	\$ 265,465
Wheat	14,062	210,930 *	116,010
Oats	4,594	114,850 *	30,435
Hay	15,572	23,360 †	186,880
Forage	555	695 †	3,475
Broom Corn	6	3,000 †	85
Clover Seed		80 *	450
Grass Seed		50 *	90
Tobacco	14	9,800 †	930
Potatoes	432	51,810 *	16,599
Vegetables	370		19,250
Total			\$ 639,860
LIVE STOCK AND PRODUCTS			
KIND	NUMBER		VALUE
Cattle	14,746		\$ 368,650
Horses	4,323		259,380
Mules	1,528		99,320
Asses and Jennets	37		3,330
Sheep	8,181		24,540
Swine	10,995		199,950
Chickens	97,013 }		
Turkeys	2,261 }		
Geese	3,040 }		53,305
Ducks	2,326 }		
Swarms of Bees	604		1,660
Honey	20,133 †		2,515
Wool	22,150 †		3,090
Milk	1,201,850 \$		
Butter	187,792 †		110,125
Eggs	518,750 †		64,845
Total			\$ 1,191,310
* Bushels.	† Pounds.	‡ Dozen.	
† Tons.	\$ Gallons.		

Photo in heading: Dry Fork Valley.

always high. Most productive farm lands are valleys of the Gasconade and Little Piney rivers, Dry Fork of Meramec and Bourbeuse rivers and their many tributaries. Soil is alluvial, ranging from black to tan. Uplands are clay, flint rock bearing. Prices: One-third at \$10; one-third at \$20; one-fifteenth at \$40 to \$50; latter being in vicinity of Rolla and St. James. Wild lands compose two-thirds of the county and sell at \$2.50 to \$7.50, owing to timber, mineral prospects or proximity to railroad. Nine-tenths are owned by local individuals and co-partners. The representative farmer lives in a com-



fortable frame house, markets poultry, vegetables, apples, wheat, eggs, and oftentimes minerals. Last year corn averaged thirty bushels and wheat twenty to the acre.

Flour and railroad ties are manufactured. Steam mills are located at Rolla, St. James and Relfe; water mills at Yancey; Beulah, and Meramec. Railroad ties are made by farmers.

**TRANSPORTATION:**—Frisco railroad, main line, St. Louis to Springfield, 32.58 miles taxed roadbed in county.

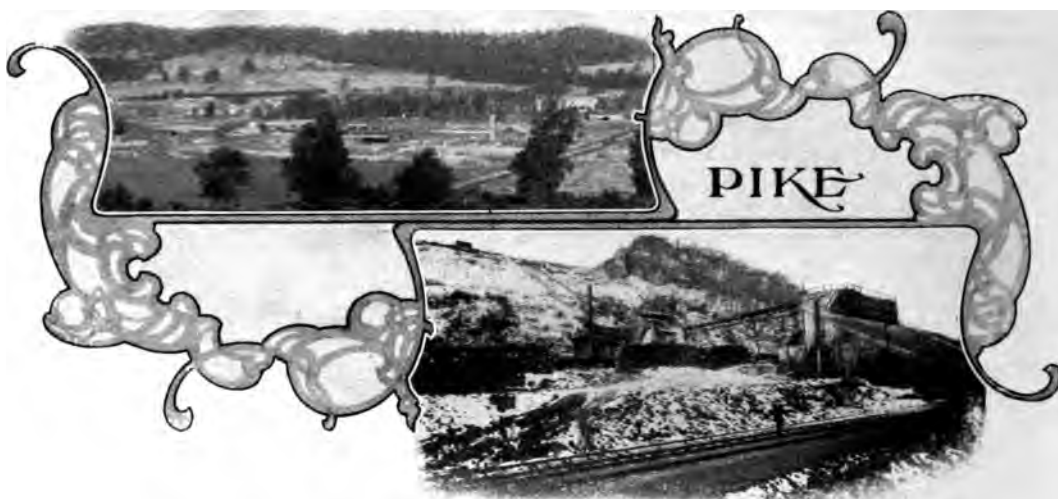
**SCHOOLS:**—School of Mines and Metallurgy; high schools at Rolla and St. James; seventy-seven rural districts, each having from six to nine months school a year.



**MERAMEC SPRINGS:**—These mammoth springs are situated in Phelps. They are the source of Meramec river and promise ultimately to become a water supply source for St. Louis. At these and the many other springs, numerous camping parties spend vacations in summer. Fishing in the three rivers. Wild turkeys, quail, and squirrels are the chief game.

**TOWNS:**—Rolla, school town; St. James, location Federal Soldiers' Home of Missouri; both centers of farming districts. Newburg is a new town, location of Frisco freight division.

**NEWSPAPERS:**—Rolla Herald-Democrat, New Era, Sharpshooter; St. James Journal.



**L**OCATION of the world's greatest nurseries, a center of Portland cement manufacture in the west, seat of large lime industry, wholesale lumber interests, pearl button factories; with a quarter thousand miles of turnpike roads; corn and cattle footing two million dollars, Pike is one of Missouri's first and most famous counties. It is situated upon the Mississippi river, half way between St. Louis and Iowa. Land embraces 620 square miles, 396,800 acres, of which 294,947 acres are in a high state of cultivation. Number of farms, 2,873, averaging 138.3 acres each, worth in total \$9,965,075.

**POPULATION:**—White, 21,503; colored, 4,241; American born, 25,231; foreign born, 513; total, 25,744. Farm homes owned, 2,102; rented, 809; other homes owned, 1,357; rented, 1,592; total families, 5,860.

**FINANCE:**—County tax, 30 cents; school tax, 65 cents to \$1.50; average, 38 cents; total assessed valuation, \$8,966,840; forty per cent actual value. No county debt; township debt, \$63,000.

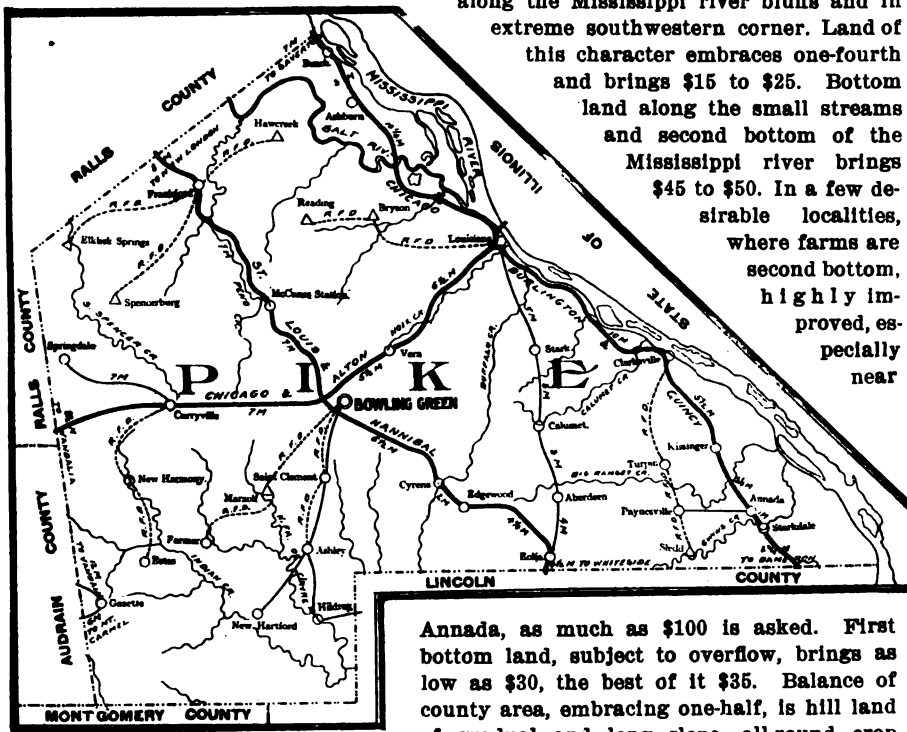
PIKE COUNTY'S 1902 CROP			
	ACRES	PRODUCT	VALUE
Corn	86,015	3,476,800 *	\$1,060,365
Wheat	43,772	1,006,765 *	604,060
Oats	13,280	698,400 *	99,600
Hay	88,725	65,835 †	329,175
Forage	3,000	3,500 †	17,500
Flax	35	255 *	270
Broom Corn	28	14,000 †	385
Clover Seed		175 *	1,155
Grass Seed		670 *	940
Tobacco	45	42,750 †	3,850
Potatoes	572	71,500 *	17,875
Vegetables	1,215		68,470
Total			\$2,203,645
LIVE STOCK AND PRODUCTS			
KIND	NUMBER		VALUE
Cattle	32,980		\$1,072,140
Horses	11,895		793,000
Mules	3,334		250,050
Asses and Jennets	191		19,100
Sheep	21,100		68,300
Swine	44,070		440,700
Chickens	172,000		
Turkeys	8,113		
Geese	5,990		170,755
Ducks	2,281		
Swarms of Bees	3,064		7,265
Honey	102,133 †		12,765
Wool	73,700 †		12,285
Milk	2,714,706 ‡		195,340
Butter	465,253 †		
Eggs	889,020 †		111,125
Total			\$3,147,990
* Bushels.	† Pounds.	‡ Dozen.	
† Pons.	§ Gallons.		

**TIMBER:**—Walnut, pecan, hickory, ash, elm, oak, cottonwood, formerly covered nine-tenths. Commercial size white oak and walnut are nearly exhausted. Other species are yet found fringing streams. One tract specially preserved amounts to 3,000 acres.

**STONE:**—Affords a leading occupation. Mississippi river bluffs comprise, in never ending supply, stone of silica, alumina and carbonate of lime, necessary to cement manufacture and lime. White limestone for building purposes is also quarried at Love, Annada, Busch, Bowling Green, and Frankford. Lime and cement plants are at Louisiana, where croppings excel both in quantity and natural proportion of composition the materials of Lehigh Valley. Mississippi Valley Portland Cement Company, capitalized \$1,500,000, is installing a plant of 5,000 barrel daily capacity, to require one thousand workers. Work began August, 1903; plant opens September, 1904. It covers fourteen acres. Marble Head Lime Company's plant covers sixty-five acres; employs 150 men; eight months' output 115,000 barrels of lime and 2,000 barrels of cement; established 1887, with branches at Hannibal, Springfield, and Sarcoble, Missouri.

**LAND:**—One-tenth is prairie, stretching west from Bowling Green, county seat, and in smaller strips elsewhere. It ranges from \$25 to \$50. Rough land is found

*Photos in heading: Stark's Nurseries, Louisiana; Marble Head Lime Co., Louisiana.*



along the Mississippi river bluffs and in extreme southwestern corner. Land of this character embraces one-fourth and brings \$15 to \$25. Bottom land along the small streams and second bottom of the Mississippi river brings \$45 to \$50. In a few desirable localities, where farms are second bottom, highly improved, especially near

Annada, as much as \$100 is asked. First bottom land, subject to overflow, brings as low as \$30, the best of it \$35. Balance of county area, embracing one-half, is hill land of gradual and long slope, all-round crop

land, and favorable to fruit tree growth. Soil is brown silt, clay undersoil, and land brings \$35 to \$50. Blue grass is indigenous. Bottom land soil is heavy black alluvial in character.

**NURSERIES:**—In loess lands which border the Mississippi limestone bluffs are located the Stark Nurseries, largest in the world. Offices employ 100 men; field, 650 men; road, 6,000 men. At Louisiana the company owns 850 acres and at Starkdale, close by, 3,000, where apple and peach tree nurture is emphasized. Enterprise established 1825; capitalization, \$1,000,000; territory covered by salesmen: United States, India, Germany, Australia, New Zealand, Corea and China.

**PEARL BUTTONS:**—Are made from mussel shells obtained from the Mississippi river. Nord-Buffum Pearl Button Company's output: sixteen hundred gross daily. One hundred people are employed; fifty blank cut machines and proportionate finishing machines.

Other leading commercial activities are wholesale lumber yard, of LaCrosse Lumber Company, head of a syndicate of twenty-two yards in Missouri. Sash and door factory, putting out \$100,000 annual product; Buffum Telephone Company, operating 500 miles of toll lines in Missouri; flouring mill, saw mill, steam laundry, at Louisiana; vinegar factory, flouring mill, at Clarksville; water bottling plant at Bowling Green; flouring mill at Frankford; powder plant, employing 700 men, at Lamotte.

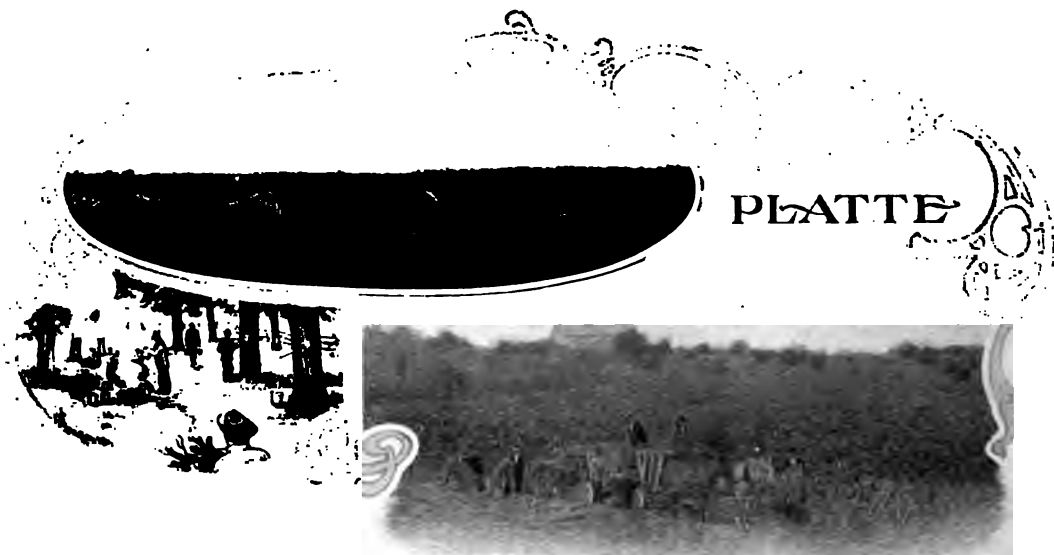
**RAILROADS:**—Main line Chicago & Alton, Kansas City to Chicago and St. Louis; Burlington to St. Louis; St. Louis & Hannibal. Louisiana is on the St. Louis freight rate.

**TURNPIKE ROADS:**—Built forty years ago, maintained by toll, connect all towns. Bridges, steel and wood; rate of toll, one cent single and one and one-half cent double teams per mile.

**SCHOOLS:**—Pike College, at Bowling Green; College at Paynesville; Louisiana High School. At crossroads, four miles northwest of Louisiana, churches occupy three corners.

**TOWNS:**—Louisiana and Bowling Green are chief with modern lighting and sanitation equipment. Clarksville, Frankford, Eolia, Annada, Curryville.

**NEWSPAPERS:**—Louisiana Times, News, Press-Journal, Herald; Clarksville Banner; Bowling Green Post, Times; Frankford Chronicle; Eolia Voice.



**E**ITHER its geographical location, character of soil or schools would entitle Platte to a place among Missouri's leading counties. All these and other elements enter in its description. The county lies between two large cities. It is adjacent to Kansas City on the south and its northern boundary line is within twenty miles of St. Joseph. It is bounded on the west and south by the Missouri river, and Platte river flows through the center north to south, their bottoms combining a large portion of alluvial lands, bounded by bluffs of loess character, which recede into hill land and prairie. Park College, at Parkville, is one of the oldest and best educational institutions in the west, under Presbyterian auspices. It is a member of the Missouri College Union. Its course covers eight years' work. Owned by this institution is a large farm upon which students desiring financial aid may work in return for all expenses. Blue grass is indigenous to all soils of the county. Originally hard and soft maple trees grew wild and the county thus came to have a unique reputation for maple sugar.

**POPULATION:**—White, 15,098; colored, 1,095; American born, 15,821; foreign born, 372; total, 16,193: Farm homes owned, 1,369; rented, 646; other homes owned, 748; rented, 705; total families, 3,468.

**FINANCE:**—County tax, 50 cents on one hundred dollars; school tax from 20 cents to \$1.30; average, 46 cents; total assessed valuation, \$7,018,843; assessed valuation per cent of actual valuation, 33 1-3; county debt, \$16,000; no township debt.

**TIMBER:**—The present approximate area of timber is twenty square miles. It is in small scattering patches along the bluffs. It consists of black oak, elm, hickory, hackberry, linn and hard and soft maples. All large growth trees are found especially preserved for pasture shade.

**MINERALS:**—None developed, but the larger portion of the county, if not its entirety, is underlaid with coal. Platte county coal is taken from shafts in Kansas through tunnels underlying the bed of the Missouri river. It is soft coal, of unusually fine quality.

**LAND:**—Platte county contains 410 square miles of land surface, equal to 262,400 acres, of which 182,567 are under cultivation. There are 2,042 farms, of an

PLATTE COUNTY'S 1902 CROP			
	ACRES	PRODUCT	VALUE
Corn	70,820	3,328,540 *	\$ 1,048,490
Wheat	51,789	983,990 *	565,795
Oats	3,256	107,448 *	27,985
Hay	12,777	23,000 †	184,000
Forage	2,195	2,925 †	14,025
Broom Corn	1	550 †	15
Clover Seed		410 *	2,255
Grass Seed		270 *	420
Tobacco	64	57,600 †	5,760
Potatoes	877	131,550 *	31,570
Vegetables	940		40,910
Total			\$ 1,921,775
LIVE STOCK AND PRODUCTS			
KIND	NUMBER		VALUE
Cattle	25,704		\$ 833,390
Horses	9,129		608,600
Mules	3,890		216,750
Asses and Jennets	94		9,400
Sheep	6,764		22,545
Swine	62,134		621,340
Chickens	141,382		
Turkeys	4,603		115,575
Geese	2,814		
Ducks	1,408		
Swarms of Bees	1,866		4,850
Honey	62,300 †		7,775
Wool	28,950		4,890
Milk	2,047,303 †		136,510
Butter	356,586 †		
Eggs	828,210 †		103,530
Total			\$ 2,057,085
* Bushels.	† Pounds.	‡ Dozen.	
† Tons.	\$ Gallons.		

Photos in heading: Platte County Farm Scenes.

average size of 128 acres, of an actual valuation of \$9,454,500. The largest farm crop is corn, exports of which annually exceed a million dollars. The larger portion of this crop is grown in the bottoms of Missouri and Platte rivers where the soil is of unlimited depth, black and alluvial. Somewhat exceeding the river bottom land in extent is the long rolling hill land. Prairie is found. There is no difference in valuation of the three characters of land, all things else, including location and improvements, being equal. Good tillable and pasture lands, well improved as to buildings and fences, \$50 to \$70 an acre. Finely improved farms, representing sixty per cent of the county, sell at \$75 to \$100 an acre. Along the silt land bluffs a small acreage is available at \$30 to \$45.

**MANUFACTURES:**—One canning factory, two distilleries, making whiskies and brandies, and five flouring mills.

**TRANSPORTATION:**—Kansas City, St. Joseph & Council Bluffs, 40 miles of railroad; Chicago, Rock Island & Pacific, 36 miles; Chicago, Great Western, 14 miles in county. Direct service into Kansas City and St. Joseph. Turnpike roads, 12 miles. Dirt roads, well graded and otherwise improved, 665 miles.

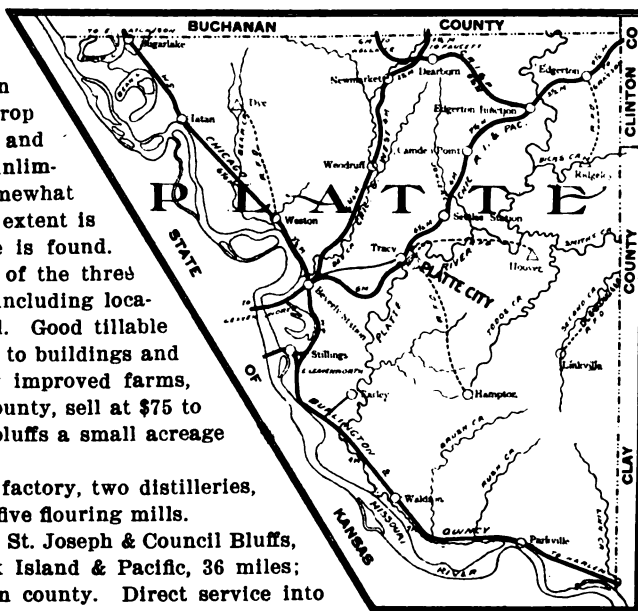
**BANKS:**—Eight State and one private bank with a total capitalization and surplus of \$215,300, and deposits amounting to \$1,272,718.34.

**MINERAL SPRINGS:**—In the southeastern part of the county are located artesian springs of chalybeate waters, similar to one of the wells at Excelsior Springs in adjoining county, Clay.

**FISHING:**—Bean Lake, Sugar Lake and Horseshoe Lake are well stocked with bass, crappie, and perch. In the summer the lake parks are the resorts of fishing parties and picnics. In season duck shooting is a sport afforded by these lakes.

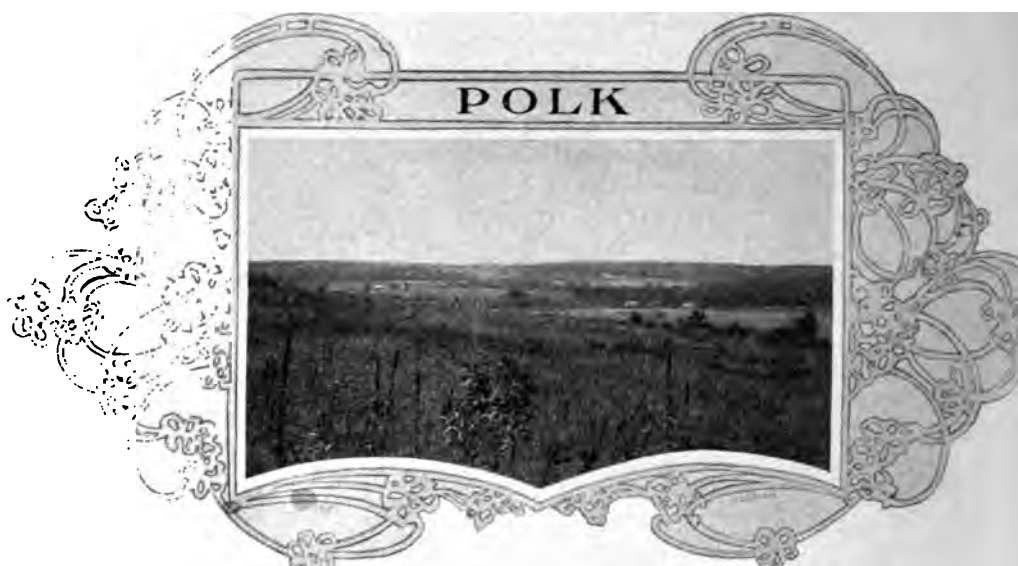
**TOWNS:**—Weston, population 1,019; Parkville, 931; Platte City, 744; Dearborn, Edgerton, Waldron, Iatan, Beverly, New Market. All these towns are supported purely by agricultural interests, excepting Parkville, which is the seat of Park College, and Platte City, county seat.

**NEWSPAPERS:**—Platte City Landmark, Argus; Dearborn Democrat; Weston Chronicle; Parkville Gazette; Edgerton Journal; Camden Point Home Bee.



WHERE HEMP HAS GIVEN WAY TO HAY.





**P**OLK encompasses six hundred and forty square miles of land surface. It is three counties north of Arkansas and is the third east of Kansas. Three-fourths of its area is developed horticulturally or agriculturally. Within these industrial confines, it is of general utility. Corn, wheat, hay, apples, cattle, horses, hogs, and poultry are staple products. Schools are a worthy feature. There are two high schools, two colleges, and the county school fund at present aggregates \$64,000. County acreage, 409,600, of which 234,426 acres are cultivated. Farms in number are 3,673; average size, 98.2 acres, worth in aggregate, \$4,232,270.

**POPULATION:**—White, 23,070; colored, 185; American born, 23,096; foreign born, 159; total, 23,255. Farm homes owned, 2,541; rented, 1,116; other homes owned, 689; rented, 489; total families, 4,835. Near Karlin is a small settlement of Bohemians, with a sprinkling of Germans.

**FINANCE:**—County tax, 50 cents on the one hundred dollars; school tax, five cents to \$1.40; average, 35 cents; assessed valuation, \$4,827,671; assessed valuation per cent of real valuation, 50; no county debt; no township debt.

**TIMBER:**—Two-thirds of Polk county's surface was once timber covered. Seven-ninths thereof is now cleared. Small, portable mills supply hardwood, rough lumber for local demand, at \$1.50 per hundred feet. Cordwood, \$2.25, price indicating abundance. There are some floating indications of jack and lead. There has been no deep prospecting. Tiff is plentiful; not commercially mined.

**LAND:**—The lay of the land is gently rolling, except for breaks of Pomme de Terre, Sac rivers; Wilson, Shules, Deer, Hominy, Dry Fork, O'Possum, McKinney's creeks. Average altitude is 1,050 feet and fully one-third of the county is prairie, three large and countless smaller ones. Main prairies are centered at Humansville, in the northwest corner; Bolivar, in exact center; and Half Way, upon the east side. Soil is widely diversified. A soil peculiar to this section is of a red color; predominates in quantity and is pre-eminently adapted to wheat growing. Last year a field near Bolivar produced 41½ bushels of wheat to the acre. Tobacco, oats, corn, and vegetables are also

POLK COUNTY'S 1902 CROP			
	ACRES	PRODUCT	VALUE
Corn	14,975	2,171,275 *	\$ 681,805
Wheat	20,881	567,195 †	311,955
Oats	13,898	486,480 *	128,905
Hay	27,140	43,425 †	282,265
Forage	2,400	3,200 †	16,000
Flax	75	300 *	310
Broom Corn	60	33,000 †	915
Clover Seed		30 *	170
Grass Seed		500 *	800
Tobacco	49	31,850 †	3,185
Potatoes	857	81,415 *	28,495
Vegetables	1,850		63,755
Total			\$1,521,650

LIVE STOCK AND PRODUCTS		
KIND	NUMBER	VALUE
Cattle	23,528	\$ 647,020
Horses	12,537	814,905
Mules	2,700	193,200
Asses and Jennets	89	7,470
Sheep	12,683	28,050
Swine	32,920	320,200
Chickens	190,184	
Turkeys	7,253	
Geese	5,699	130,970
Ducks	2,069	
Swarms of Bees	1,489	4,323
Honey	49,633	6,204
Wool	46,650	7,775
Milk	2,611,290 \$	
Butter	53,889 †	149,225
Eggs	928,610	116,000
Total		\$2,414,462

\* Bushels. † Pounds. ‡ Dozen.  
 † Tons. \$ Gallons.

Photo in heading: In Pomme de Terre River Bottom.

avored of this soil. River and creek bottoms are black alluvial formation, once covered with heavy growth of linden, cottonwood, sycamore, box elder, mulberry, and paw-paw patches. Corn is the chief crop. Prairies range from black to ashy color and are best adapted to grass. All soils and land-lays are adapted to apple culture. One-third of farms are selling at \$35 to \$45 an acre; one-third at \$20 to \$30; one-fourth at \$5 to \$15, and the remaining one-twelfth, in vicinities of Humansville, Bolivar, Half-way, and Fairplay, at \$45 to \$55. County is long settled and farm improvements are better than the section's average.

**MANUFACTURES:**—Are of a size commensurate with local needs. Brick, wagons, creamery products, native hardwood lumber are made. A bottling works at Bolivar and canning factories at Bolivar and Fairplay.

**TRANSPORTATION:**—Frisco railroad operates two lines north and south through county, connecting with Kansas City and Springfield. Total mileage, 65.41 taxed roadbed.

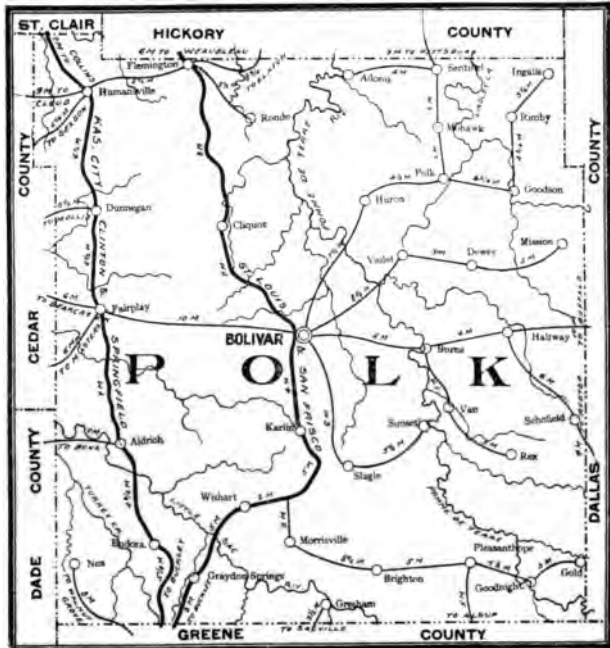
**SCHOOLS:**—High schools are supported at Humansville and Bolivar. Morrison College, at Morrisonville, and Southwestern Baptist College, at Bolivar, afford local higher educational advantages. Churches are of Protestant denomination.

**WATER:**—Living water is abundant in wells of fifteen to forty feet. No alkali. Streams are crystal clear and flow continuously, over gravel beds.

**ROD AND GUN:**—Graydon Springs is a summer resort of local importance. A small hotel accommodates fishermen and hunters. Eudora Springs is also a favorite sportsman headquarters. Streams are clear, swift, and are stocked with game fish. Small game is plentiful.

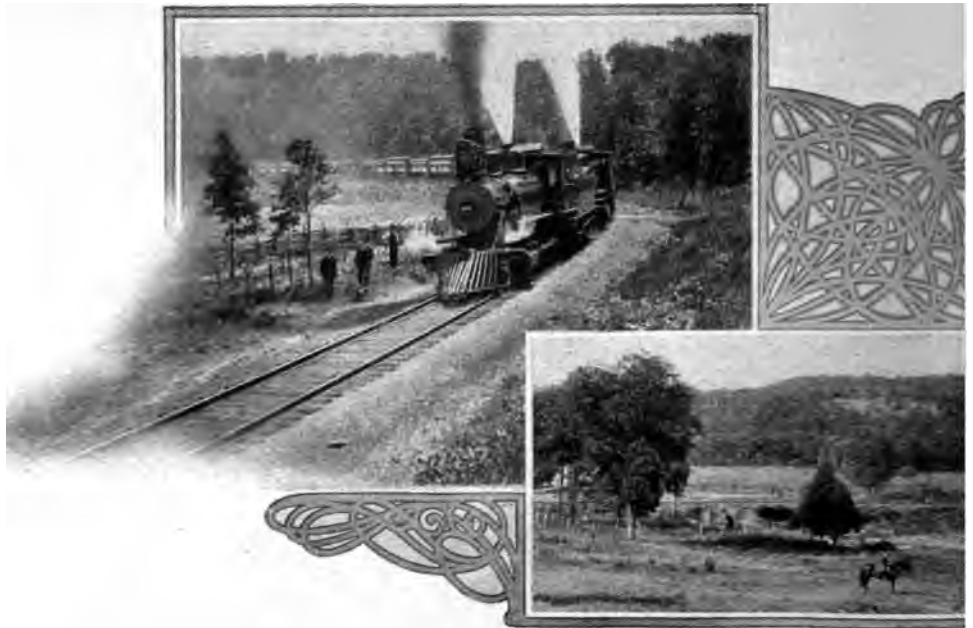
**TOWNS:**—Bolivar, county seat; Humansville, Morrisonville, Fairplay and Aldrich are leading towns.

**NEWSPAPERS:**—Bolivar Free Press, Herald; Fairplay Advocate; Humansville Star-Leader.



MISSOURI APIARY.

# PULASKI



**P**ULASKI is the center of that portion of the State lying south of the Missouri river. It is one hundred and ten miles southwest of St. Louis, on the Frisco railroad, and Waynesville, the county seat, is fifty miles due south of Jefferson City. The surface is mountainous. There are 520 square miles of land. Of the 332,800 acres, improved farms include 75,660. Farms number 151.2, embracing on an average 129 acres of cultivable, timber and pasture lands, of a total actual selling value of \$1,720,080.

PULASKI COUNTY'S 1902 CROP			
	ACRES	PRODUCT	VALUE
Corn	27,607	966,245 *	\$ 285,040
Wheat	14,501	232,015 *	127,610
Oats	2,073	45,605 *	12,085
Hay	11,138	16,705 †	116,985
Forage	660	825 †	4,125
Broom Corn	4	2,000 †	55
Clover Seed		15 *	75
Grass Seed		90 *	160
Tobacco	15	10,500 †	1,000
Potatoes	291	34,920 *	11,175
Vegetables	340		18,580
Total			\$ 516,840
LIVE STOCK AND PRODUCTS			
KIND	NUMBER		VALUE
Cattle	11,728		\$ 298,300
Horses	3,794		227,640
Mules	971		62,115
Asses and Jennets	65		5,850
Sheep	8,403		26,410
Swine	20,271		202,710
Chickens	52,566		
Turkeys	1,396		
Geese	2,399		86,975
Ducks	1,241		
Swarms of Bees	310		805
Honey	10,333		1,290
Wool	24,820		4,135
Milk	1,043,850 \$		61,565
Butter	205,422 †		
Eggs	307,703		38,465
Total			\$ 962,160
* Bushels.	† Pounds.	Dozen.	
† Tons.	\$ Gallons.		

**TIMBER:**—Excepting two thousand acres in the vicinity of Franks, all the land was formerly covered with timber. This consisted chiefly of white oak, black oak, post oak, scrub oak, and hickory, much of it small in individual size. Along the creeks were found sycamore, cottonwood and walnut, of much larger growth. Two-thirds of the timbered lands have been cut over and bordering the railroad and creeks practically all merchantable size trees have been made into railroad ties and rough board lumber. Mills are always small. Stationary machinery is located at Kerr's, near Waynesville; Ott's, in the far southwest; and at Hooker. Portable mills are at work to the extent of eight or ten. Native undressed oak lumber is worth \$1 per hundred. Owing to demand for walnut lumber, many farmers are propagating this timber. One three-acre walnut grove near Waynesville is due to this.

**MINERALS:**—Coal, iron, zinc, lead, tiff, pyrites of iron, and Missouri onyx are found. At twenty-foot depth coal is located, though not extensively mined, at Cookville. Iron ore is found upon the surface in nearly every part of the county. Tons of tiff and equal quantity of pyrites of iron are easily accessible. Along the high, rugged bluffs are many caves filled with most beautiful stalactitic and stalagmitic formations closely resembling onyx. Most of these caves are not fully

*Photos in heading: Double-heading over Dixon Hill; Farm Scene near Wheeler.*

explored. They are known to embrace oftentimes five or ten acres, and water covers most of the floor space.

**LAND:**—Pulaski county is located in the heart of the Ozark mountains. But one-fifth, the stream valleys, is susceptible of cereal growth. The four-fifths is high, broken, rock-bearing mountain land, whose wild picturesqueness has won for this country the title, "The Switzerland of America." The St. Louis & San Francisco railroad runs on a ridge across the north end of the county. Its average elevation is 1,462 feet above sea level. South of this come the precipitous bluffs of Gasconade river, a deep-set, swiftly flowing mountain stream. From the south this river has two chief tributaries, the Piney and Roubidoux rivers; all are chiefly supplied by springs of great magnitude and number. Between the two tributaries in the south side of the county, is a post oak flatwoods district. This is high, comparatively level land, embracing the towns of Bloodland, Big Piney and Cookville. In the rough lands of the southwest there stands the forest primeval. The general basic formation of the land is largely soft, porous, volcanic rock and irregular magnesian limestone, which easily disintegrates. In the Gasconade, Roubidoux and Big Piney bottoms, and north of the Frisco railroad, together with the few scattering farms, the cultivated land is located, amounting to one-fifth of the county's surface. Thirty per cent of this one-fifth can be bought at \$3 to \$8; fifty per cent at \$10 to \$15; eighteen per cent at \$25, and two per cent at \$40 to \$50. The wild land, amounting to nearly four-fifths, is available at \$1.25 to \$5 an acre. Nine months a year it is coated with a growth of bluestem grass.

**MANUFACTORIES:**—Flouring mills at Dixon, Richland, Waynesville, Bloodland, Schlicht. Railroad ties are a leading source of income to all farmers living within hauling distance of the railroad or rivers.

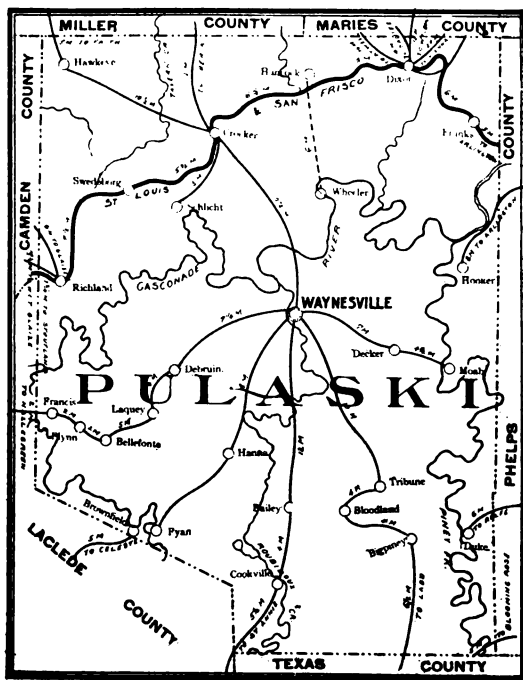
**TRANSPORTATION:**—The Frisco railroad has 36.16 miles of track within the county. Much timber product is rafted upon the rivers to market.

**SPRINGS:**—On every quarter section of land. Eight springs have proved each of sufficient power to move milling machinery.

**TOWNS:**—Richland, fruit, live stock and cereal market, and shipping point; Dixon, center of fruit raising district; Waynesville, county seat; Crocker; Swedeborg, a Swedish settlement; and Hancock, are leading.

**POPULATION AND FINANCE:**—White, 10,357; colored, 37; American born, 10,144; foreign born, 250; total, 10,394. Farm homes owned, 1,075; rented, 450; town homes owned, 262; rented, 248; total families, 2,035. County tax, 40 cents; school tax, average, 65 cents; total assessed valuation, \$2,177,220; assessed valuation per cent of real valuation, 50; no county debt; no township debt.

**NEWSPAPERS:**—Waynesville Democrat; Dixon Echo; Richland Cyclone.



A FARMING SECTION, PULASKI COUNTY.



**A**T the northern edge of Missouri, midway east and west, is Putnam county, where live stock and mining and manufacturing tramp the treadmill of commerce. Cattle exports reach a grand total of one and one-half million dollars a year. Horses and mules are second in importance. Hay is a farm product of extensive proportion. Private dairying and poultry raising are growing. The county is seventh in coal, annual output 125,543 tons. The largest manufacturing plant is Putnam Dye Works, Unionville, second largest establishment of its kind in the world. There is a permanent school fund, long established. In square miles the county measures 542, equal to 346,880 acres, of which 246,194 acres are in a high state of cultivation. There are 2,596 farms, averaging 125.9 acres of cultivable, pasture and timber lands. Farm property is estimated at \$7,210,074.

**POPULATION:**—White, 16,672; colored, 16; American born, 16,378; foreign born, 310; total, 16,688. Farm homes owned, 1,962; rented, 599; other homes owned, 458; rented, 481; total families, 3,445.

**FINANCE:**—County tax, 50 cents; school tax, average, 45 cents; total assessed valuation, \$4,482,033; assessed valuation per cent of actual valuation, 35; county debt, \$11,000; no township debt.

**TIMBER:**—One-third area of Putnam county originally bore all varieties of oak, elm, walnut, hickory, sugar maple, soft maple, Linden and hackberry. Very little commercial timber remains; removed, not for its own value, but in order to render land cultivable.

**MINERALS:**—Bituminous coal, high grade, underlies one-third of county. Annual production 125,543 tons. In output comparison eight times in the past eleven years Putnam has ranked seventh among the counties of the State. Only six mines, along the Chicago, Burlington & Kansas City railway have been developed for shipping but several new mines are opening and the new Iowa & St. Louis railroad. Some one hundred or more lands distributed over an area of 100 square miles are in operation. Limestone for building purposes.

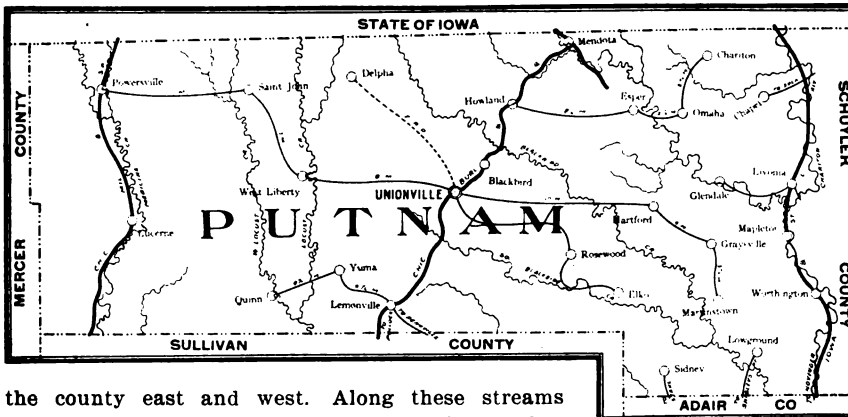
The county line forms eastern boundary. The county line runs from the southwardly, midway between the Missouri and Kansas lines. The county line runs from the southwardly, midway between the Missouri and Kansas lines. The county line runs from the southwardly, midway between the Missouri and Kansas lines.

#### PUTNAM COUNTY'S CROP

CROP	QUANTITY	VALUE
Wheat	1,200,000	\$1,200,000
Oats	1,000,000	\$1,000,000
Hay	1,000,000	\$1,000,000
Stock	1,000,000	\$1,000,000
Other	1,000,000	\$1,000,000
Total	5,200,000	\$5,200,000

#### PUTNAM COUNTY'S MINERALS

MINERAL	QUANTITY	VALUE
Coal	1,200,000	\$1,200,000
Limestone	1,000,000	\$1,000,000
Other	1,000,000	\$1,000,000
Total	3,200,000	\$3,200,000



the county east and west. Along these streams and their tributaries are alluvial lands of great fertility, bounded in most places by narrow strips of rough lands gradually toning into a rolling topography, of which general character the county is. All the cereals of this latitude are grown. Timothy hay, clover and blue grass rival in luxuriance and quality the most noted portions of the United States. For timothy seed the county has a distinct reputation. The great percentage of land sells at \$25 to \$35 an acre. Small acreages of rough land, fit chiefly for fruit or pasturage, is available at \$10. Best farms, well improved in fence and residence and outbuildings, bring \$50 an acre. Immediately adjacent to Unionville or Lucerne, small acreages range higher, on account of location. Watermelons and cantaloupes are grown in the bottoms of Chariton river.

**MANUFACTURES:**—Putnam Dye Works at Unionville employ a large number of people. Several kilns produce sufficient brick of first quality for local demand. At Powersville is located a cheese factory, products from which cover large section in Missouri and Iowa. Wagon and hay stacker factory at Unionville.



**SCHOOLS:**—Enumeration, 5,087. School terms range from six months, in the rural districts, to eight months in towns. Unionville High School is approved by the State University.

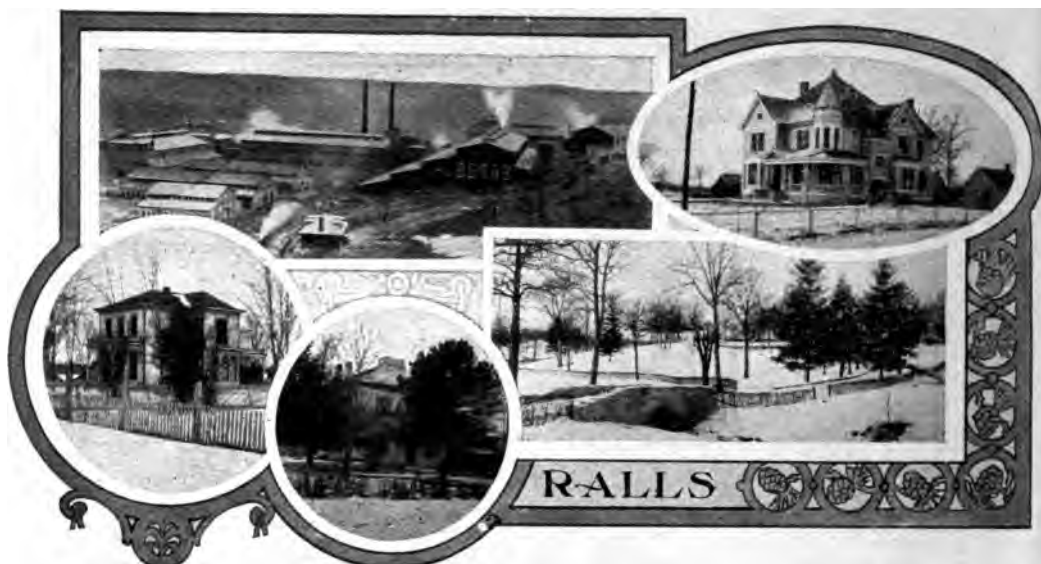
**TRANSPORTATION:**—Three railroads traverse the county north and south: Chicago, Milwaukee & St. Paul, Chicago, Burlington & Kansas City, Iowa & St. Louis. Total mileage 33.45. Miles of dirt road, 2,000.

**TOWNS:**—Unionville, county seat, population, 2,050; waterworks, electric lights, location of mines; commercial and geographical center of county. Lucerne, population, 292; Powersville, Mendota and Blackbird are mining towns. Agriculture contributes most of support to all towns.

**NEWSPAPERS:**—Unionville: Republican, Pantagraph, Democrat; Powersville Record; Lucerne Standard.



PUTNAM FADELESS DYE BUILDING, UNIONVILLE.  
MENDOTA COAL MINE, MENDOTA.



**R**ALLS is adjacent to the Mississippi river, half way between the city of St. Louis and the Iowa line. While its topography is generally rolling, and along the river hilly, its soil is universally of that productive type common to Missouri's undulating prairie district. The county is devoted to general agriculture, chiefly. There are 490 square miles of territory, three-fourths given to farming and in a high state of cultivation. A great many pure bred cattle and horses are raised and corn surplus amounts to almost a million dollars a year. A towering industry in Ralls is that of Portland cement and lime manufacturing. This county is famous for Bear Creek limestone, which tests 98 per cent pure lime. Peculiar to the northern portion of the county are some springs of salt impregnation, and an artesian well where the water spouts from the ground to the height of six feet. In a salt spring, three miles west of New London, have been found implements used long ago by the French in securing salt sediment from the water. Good schools are the pride of the people of Ralls. There are two high schools and Van Rensselaer College, one of the oldest in the State.

POPULATION:—White, 11,360; colored, 927; American born, 11,990; foreign born, 297; total, 12,287. Farm homes owned, 1,415; rented, 534; other homes owned, 377; rented, 359; total families, 2,685.

FINANCE:—County tax, \$1.20 on one hundred dollars valuation; school tax, average, 38 cents; total valuation, \$4,971,094; assessment valuation is one-half the actual valuation of lands. County debt, \$272,000; no township debt.

TIMBER:—The northeastern one-third along the Mississippi river, is original timber bearing land. The trees were black oak, white oak, red oak, walnut, elm, hackberry, hickory, and sugar maple. There is yet sufficient timber for local rough board and firewood purposes.

MINERALS:—Limestone is the greatest mineral. The Mississippi bluffs are of this material and along Bear Creek, in the northern part, are limestone bluffs almost of pure lime. At Oakwood are located the lime kilns for which Ralls is famous. From the same material is made cement. Quarrying is done mostly near Iasco. Coal is mined in the southwest part of the county at

RALLS COUNTY'S 1902 CROP			
	ACRES	PRODUCT	VALUE
Corn	74,300	3,190,685 *	\$ 973,160
Wheat	14,395	328,815 *	194,305
Oats	8,305	258,460 *	64,615
Hay	30,900	52,535 †	288,945
Forage	1,005	1,290 †	6,450
Broom Corn	102	51,000 †	1,405
Clover Seed		80 *	530
Grass Seed		3,050 *	4,270
Tobacco	19	18,050 †	1,625
Potatoes	571	65,665 *	16,415
Vegetables	820		31,165
Total			\$ 1,788,885
LIVE STOCK AND PRODUCTS			
KIND	NUMBER		VALUE
Cattle	27,224		\$ 484,780
Horses	8,891		592,735
Mules	2,132		159,900
Asses and Jennets	145		14,500
Sheep	5,412		16,235
Swine	31,685		316,850
Chickens	151,114		
Turkeys	4,820		
Geese	4,700		55,900
Ducks	1,580		
Swarms of Bees	1,861		4,496
Honey	62,083 †		7,755
Wool	59,820 †		9,970
Milk	1,865,784 \$		134,725
Butter	345,535 †		
Eggs	575,910 †		71,990
Total			\$ 1,969,836
* Bushels.	† Pounds.	Dozen.	
† Tons.	\$ Gallons.		

Photos in heading: Atlas Portland Cement Co.; Home of E. G. Matson, New London; Home of May Gill, Perry; William Wood's Farm, Near Perry; The Garth Farm.

Perry. Seventy men are employed in the mines. Shafts are about sixty feet deep; vein twenty-six inches thick. Most of the production is consumed at the cement and lime works, within the county.

**LAND:**—Total number of acres, 313,600, of which 230,319 acres are included in improved farms. There are 1,996 farms, of an average size of 144.3 acres, worth \$6,910,400, according to present selling figures. Two-thirds of the county is prairie, beginning billowy upon the eastern bluff border and gradually toning down to the undulating kind at the west edge of Ralls. Farms are well improved generally, and sell at \$25 to \$60 an acre. That portion of the county which has been cleared

of trees sells at an average price of \$40 an acre. In the immediate vicinity of New London some finely improved acreages are held at \$75 to \$90. The remaining ten per cent, lying along Salt river and the Mississippi river bluffs, is rough and timber bearing and may be had at \$15 to \$20 an acre. This land is especially favorable to orcharding and live stock grazing.

**MANUFACTURES:**—Cement and lime are the chief manufactured products. Some flour and corn meal are made.

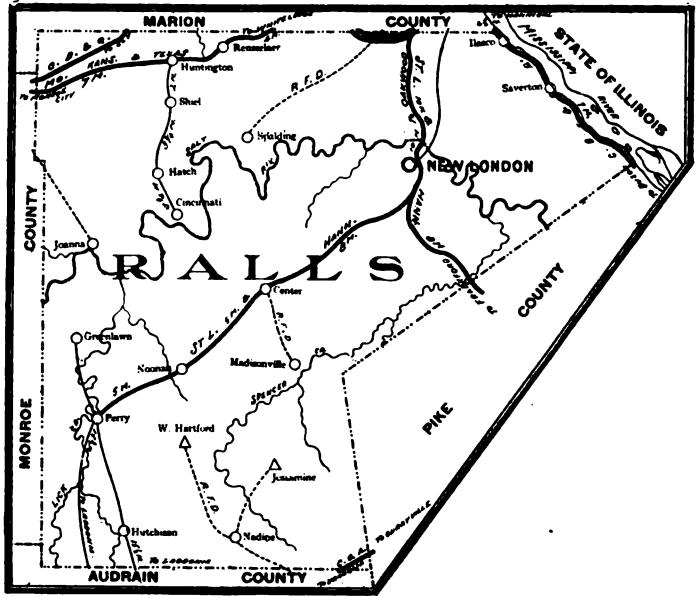
**TRANSPORTATION:**—Chicago & Alton, St. Louis, Keokuk & Northwestern, St. Louis & Hannibal, two divisions, Hannibal & St. Joseph.

**SCHOOLS:**—Attendance enumeration, 3,556; number of schools, 69; number of high schools, two, at New London and Perry. Van Rensselaer College, at the town of its name, is an old and respected institution.

**SPRINGS:**—Spalding Springs, Salt Springs and Tremore's Lick are springs of water heavily charged with salt. At the first named place is also an artesian well and thereupon is founded a summer resort. Here are a two-acre lake and hotel.

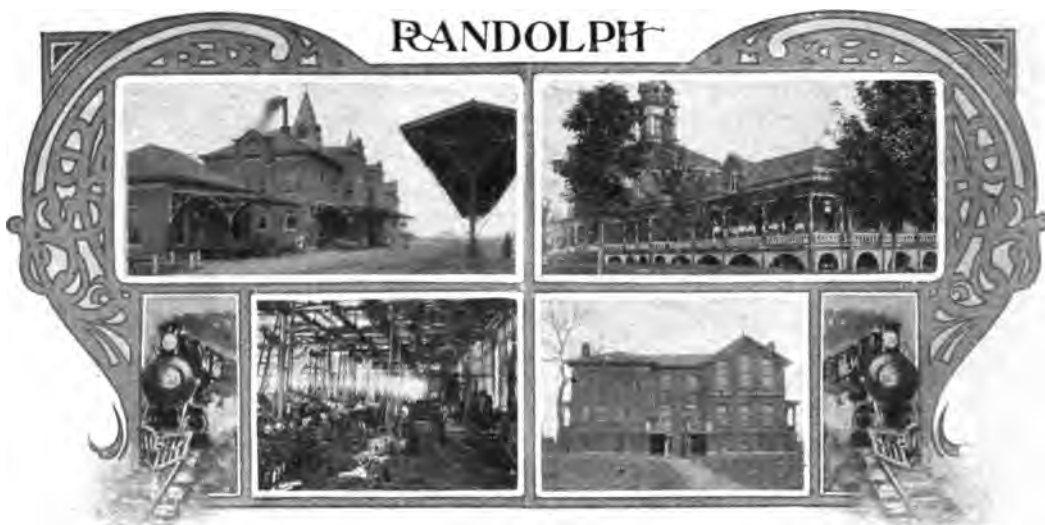
**TOWNS:**—New London, county seat, population, 881; Perry, population 624; Center, 300, are the towns incorporated. Each is mainly supported by its live stock and general agricultural interests. Perry has coal fields of importance. Ilasco, on the Mississippi river, is location of cement manufacturing center, and Oakwood is the home of lime manufacture.

**NEWSPAPERS:**—New London: Ralls County Record; New London Times; Perry Enterprise.



GARTH RESIDENCE, RALLS COUNTY.





**R**ANDOLPH, half way between Kansas City and St. Louis, twenty miles north of the Missouri river, is a foremost county by reason of its coal, railroads and agricultural interests. It is the third coal producing county of the State. Coal measure underlies virtually the whole county to the extent of greater abundance than has any other. Railroad interests are large and must be accounted to for markets which greatly encourage agriculture, the third pillar of industry. Moberly, chief city, is one of the most important railroad centers of north Missouri. From five directions trains enter its union station. The main western shops of the Wabash railroad are located here where are also the offices of three main divisions of the road. Two divisions of the Missouri, Kansas & Texas meet here. At two other points in the county the Chicago & Alton main line from Kansas City to St. Louis and

to Chicago crosses the Wabash and the Missouri, Kansas & Texas railroads. Vegetables and poultry are the source of support for many small farms which supply Moberly markets. Private dairying also is carried on. The larger farmers raise cattle, horses and hogs to the extent of nearly two millions of dollars worth a year and above this consumption as represented, have a surplus of corn which sells for from eight hundred thousand to a million dollars annually.

**POPULATION:**—White, 21,600; colored, 2,842; American born, 23,435; foreign born, 1,007; total, 24,442. Farm homes owned, 1,863; rented, 574; other homes owned, 1,569; rented, 574; total families, 4,580.

**FINANCE:**—County tax, 50 cents on one hundred dollars valuation; school tax from 40 cents to \$1.00, average, 65 cents; total assessed valuation, \$7,784,588; assessment for taxes is based upon a valuation forty per cent of actual valuation. There is no indebtedness.

**TIMBER:**—Originally was found along the two branches of Chariton river and other lesser streams. Comprised hickory, black oak, white oak, post oak, red oak, walnut, elm, cottonwood and hackberry. The commercial timber has been removed.

**MANUFACTORIES:**—Railroad shops are the chief factories. At Moberly are extensive brick kilns and brick is made at other towns for local purpose. Flour and cigars are manufactured.

RANDOLPH COUNTY'S 1902 CROP			
	ACRES	PRODUCT	VALUE
Corn	57,577	2,681,265 *	\$ 832,275
Wheat	3,809	82,725 *	45,500
Oats	3,802	115,570 *	30,625
Hay	39,859	96,910 †	581,460
Forage	2,290	2,860 †	14,300
Broom Corn	8	4,000 †	110
Clover Seed		155 ‡	870
Grass Seed		225 ‡	405
Tobacco	6	4,300 †	400
Potatoes	414	59,250 *	18,960
Vegetables	1,045		53,425
Total			\$1,578,930

LIVE STOCK AND PRODUCTS		
KIND	NUMBER	VALUE
Cattle	29,774	\$ 967,655
Horses	9,180	606,890
Mules	2,667	204,275
Asses and Jennets	146	18,250
Sheep	19,589	65,220
Swine	34,845	248,460
Chickens	119,634 †	
Turkeys	5,542 †	118,945
Geese	3,888 †	
Ducks	947 †	
Swarms of Bees	2,804	6,295
Honey	93,467 †	11,685
Wool	71,950 †	11,990
Milk	2,137,144 †	186,920
Butter	397,046 †	73,845
Eggs	886,750 †	
Total		\$2,516,920

\* Bushels. † Pounds. ‡ Dozen.  
† Tons. § Gallons.

Photos in heading: Union Station; Wabash Hospital; Wabash Machine Shops; Railroad Young Men's Christian Association Building, Moberly.

**LAND:**—From a standpoint of soil, Randolph county is three-fourths vegetable loam, mulatto colored, found upon the undulating prairies of northeast Missouri and southern Iowa. The northwest corner, comprising the balance, is the same excepting that it is deeper in places and less deep in others owing to the country being more rolling. Originally the surface was covered with a matter mass of tall wild prairie grass. Wherever the land is pastured blue-grass springs up to the crowding out of all other kinds of grass. There are 470 square miles of land surface, 300,800 acres, of which 224,515 acres are in a high state of improvement. There are 2,460 farms of an average size of 116.9 acres. Estimated valuation of farming lands, \$9,043,005. Forty per cent, the black, loamy prairie land, sells at \$45 an acre; ten per cent of the prairie at \$35; ten per cent rough timber land at \$12 to \$15; forty per cent, rich soil, originally timbered land \$40 an acre.

**TRANSPORTATION:**—Wabash, Missouri, Kansas & Texas, and the Chicago & Alton have main line roads intersecting the county. Moberly is division center for the first two named. The Chicago & Alton intersects the Wabash at Clark and the M., K. & T. at Higbee. The railroads touch the main coal camps.

**MINERALS:**—Annual production of coal approximates 450,181 tons. Other counties of Missouri have larger developed areas but none equals Randolph in coal deposited. Last year 21 mines were operated, employing one thousand men. Most extensive operations were carried on at Higbee, Elliott, Huntsville and Renick. Shafts are from 100 to 200 feet deep. Vein of coal averages four feet thick.



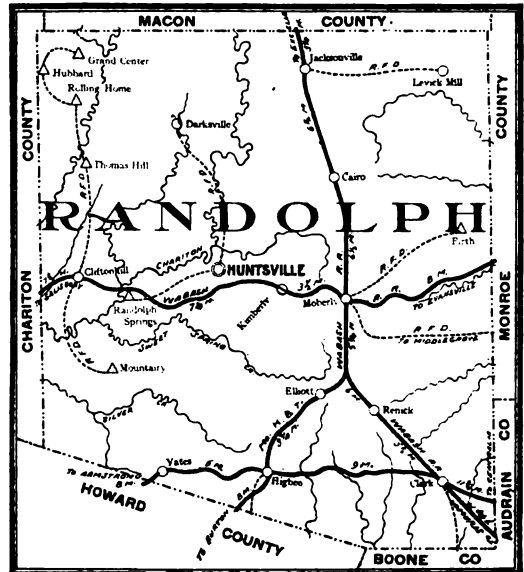
MISSOURI HEREFORDS.

**SCHOOLS:**—There are three high schools: Moberly, Huntsville and Higbee. The first is articulated with the State University.

**SPRINGS:**—Randolph Springs on the Wabash railroad is a favorite excursion point. An improved park is here located in which is a spring of mineral water.

**TOWNS:**—Moberly, population, 8,012, railroad town and central market. Huntsville, population, 1,805, county seat. Higbee, 1,151, mining town; Clark, 223; Renick, 196; Jacksonville, 195; Cairo, 173, Clifton Hill. All towns are centers of fine farming districts and derive large income as trading centers and as centers for live stock sales and shipments.

**NEWSPAPERS:**—Moberly Monitor, Democrat; Huntsville Herald; Clifton Hill News; Higbee Rustler; Clark Chronicle.





**R**AY is agricultural, and it has extensive coal interests. It is upon the north bank of Missouri River, one hour and a half east of Kansas City. Corn, cattle, horses, hogs, blue grass, timothy and alfalfa hay, and mules lead, in order, in point of income. County has reputation in Irish potato production and in butter. It contains 584 square miles, 373,760 acres, of which 288,627 acres are included as arable. Farms number 3,321, average size, 102.6 acres, worth in aggregate, \$11,171,973.

**POPULATION:**—American born, 24,241; foreign born, 564; white, 23,197; colored, 1,608; total, 24,805. Farm homes owned, 2,199; rented, 1,032; other homes owned, 946; rented, 1,104; total families, 5,276.

**FINANCE:**—County tax, 99 cents on \$100; school tax, 25 cents to \$1.20; average, 44 cents; total assessed valuation, \$9,049,279; forty per cent of actual value. No debts.

RAY COUNTY'S 1903 CROP			
	ACRES	PRODUCT	VALUE
Corn	126,315	6,315,750 *	\$ 1,989,460
Wheat	11,976	299,400 *	173,185
Oats	3,023	75,575 *	19,650
Hay	40,279	64,445 †	451,115
Forage	3,480	4,640 †	23,300
Broom Corn	6	3,300 †	90
Clover Seed		740 *	4,070
Grass Seed		510 *	798
Tobacco	28	26,300 †	2,520
Potatoes	1,517	227,550 *	54,810
Vegetables	1,205		60,160
Total			\$ 2,717,920
LIVE STOCK AND PRODUCTS			
KIND	NUMBER	VALUE	
Cattle	38,595	\$ 1,251,335	
Horses	12,439	829,265	
Mules	4,464	334,800	
Asses and Jennets	142	14,200	
Sheep	6,668	22,225	
Swine	84,304	843,940	
Chickens	206,444	176,280	
Turkeys	5,831		
Geese	5,041		
Ducks	2,046		
Swarms of Bees	2,353	7,385	
Honey	78,433 †	9,805	
Wool	29,190 †	4,865	
Milk	3,001,128 †	213,325	
Butter	570,058 †		
Eggs	1,222,310	152,790	
Total		\$ 3,863,215	
* Bushels.	† Pounds.	Dozen.	
† Tons.	§ Gallons.		

**TIMBER:**—Owing to high state of land development, far past commercial state. Originally surface was practically covered with large growth of all oak denominations, hickory, walnut, elm, ash and hackberry. Fire wood timber is yet in quantity sufficient and a few portable mills find occupation in lumber manufacture.

**COAL:**—"Not a foot of land in Ray county without coal under it," is a concise statement of this mineral resource. High grade soft coal is extensively mined at Richmond, Fleming, Swanwick, Rayville and Knoxville. Limestone is within wagon haul of all points.

**LAND:**—The land which lends distinction to Ray as corn producing area, is that situated in the Missouri bottoms. At Camden, on the river, central point east and west, bluffs touch the river bank. From this point, they take directions northwest, and northeast at angles of 45 degrees, defining wide bottoms. Bluff line west of Camden runs north of Albany, this bottom being, therefore, two to five miles wide. East of Camden, bluff line follows due northeasterly until Morton is reached, whence hills range easterly, crossing county line into Carroll. First time in ten years, land south of Wabash railroad, across entire county overflowed last spring, and while enriched, may now be bought, west of Camden, at prices ranging from \$45 to \$75.

*Photos in heading: Oats High as a Man's Head, Farm of G. W. Falk, Richmond; Mules Owned by Whitmer Brothers, Richmond; Richmond Coal Shaft No. 17.*

East of Camden it sells at \$50 to \$75, with an occasional second bottom farm at \$100, because of elegant improvements and location with reference to town. Soil of entire strip is rich, black loam. It is of inexhaustible depth. Corn is known to excel on this land after thirty years' consecutive yield. Wheat grows as luxuriously. Prairie embraces eight square miles to northeast, east and southeast of Lawson; a square strip of twenty square miles northeast of Knoxville; eight square miles centering at Georgeville; and for the most part in strips within that section in eastern part described by a circular line through points one mile south of Tinney's Grove, a mile east of Millville, and at Morton. Soil is black, light-weight loam, average three-foot depth, friendly to clover, blue grass and timothy. Sells at \$35 to \$60, averaging \$50. Near Lawson it reaches \$100, though rarely. Bulk of balance of Ray county is blue grass hill land, ranging in price from \$35 to \$70. Within half a dozen miles of Richmond, prices range \$50 to \$75, to \$100 within a mile of town. Untillable land is practically unknown. A few farms adjoining Crooked river, three to five miles northeast of Vibbard, and some in extreme northeast corner of county contain this surface; selling as low as \$20. Adjoining land oftentimes sells at \$40 to \$50. Farm improvements are splendid, comparing with best districts of Iowa or Illinois. Every farmer has orchard bearing apples, pears, peaches, apricots and berries.

**MANUFACTORIES:**—Flouring mills at Richmond, Hardin, Orrick and Vibbard. Brick and tile factory at Lakeview. Soda waters bottled; vegetables canned in season at Richmond plants. Watkins' butter marketed at Lawson, said to be best in State.

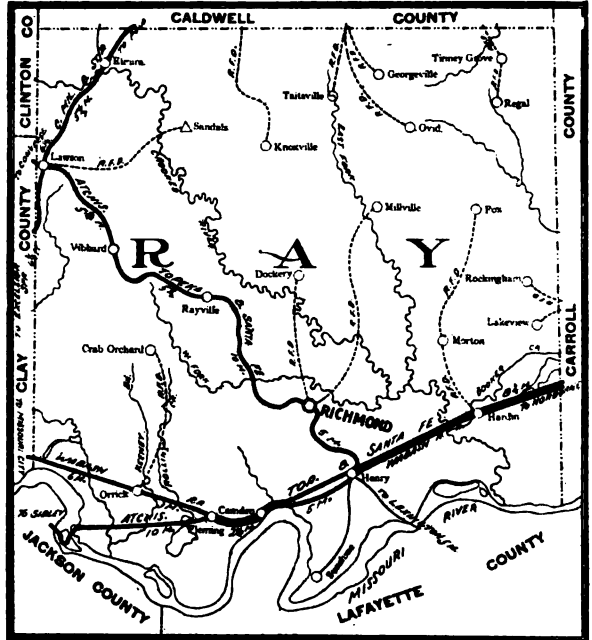
**TRANSPORTATION:**—Three main line railroads to Kansas City; branch to St. Joseph.

**SCHOOLS AND CHURCHES:**—Richmond High School, approved, heads county's splendid public system. Woodson Institute, co-educational academy, correlated with Central College, Fayette. All Christian churches represented.

**WATER:**—Drinking water in hills and prairies of limestone seepage; in bottoms, strongly iron impregnation. St. Cloud Springs, three miles north Richmond, is picnic ground. Sulphur spring near Millville.

**TOWNS:**—Richmond, county seat, has waterworks, electric lights, telephone, business streets brick paved. Hardin, Lawson, Orrick, and Morton, have electric lights, telephones, and macadamized streets; Camden, Vibbard, Rayville, Elmira and Floyd are railroad towns; Millville, Knoxville, Russelville, Tinney's Grove and Georgeville are inland. Agriculture and stock raising support all.

**NEWSPAPERS:**—Richmond Conservator, Missourian, Democrat, Republican; Ray County Review, of Lawson; Hardin News; Orrick Star, Times.



PURE BRED HOLSTEINS.

# REYNOLDS



**N**ATURE'S endowments to Reynolds comprise timber, minerals and a few broad river and creek bottoms for grain growth unexcelled. The county is situated in southern Missouri, three counties north of Arkansas and five west of Mississippi river. Timber interests may be considered dual; those of yellow pine and of hardwood. Pine timber is native to 275,000 acres of the 531,000 acres included within county domains, lying in the south and west. Pine lands have been cut up to eight thousand feet an acre; averaging five thousand. A Wayne county milling company owned 180,000 acres, 30,000 acres of which it recently sold as land with timber removed. Hardwood acreage grew white, black and post oak. It is used for railroad tie and lumber making. Mill centers are Lesterville, Ellington, and Bee Fork, having a sawing capacity of 15,000 feet or less daily.

Railroad ties are floated down Black river; within the year one tie drive represented 650,000 railroad ties. Acres of solid beds of red granite and of grey sand stone, and iron ore comprise chiefly the minerals, untouched. Quality of granite deposited is seen in buildings of Washington University at St. Louis and in street pavements. Ginseng is grown in eastern Reynolds.

**POPULATION:**—White, 8,161; colored, 0; American born, 8,100; foreign born, 61; total 8,161. Farm homes owned, 797; rented, 388; other homes owned, 192; rented, 129; total families, 1,506.

**FINANCE:**—County tax, 47 cents; school tax average, 43 cents; total assessed valuation \$1,804,513; two-thirds of real valuation; no county debt; no township debt.

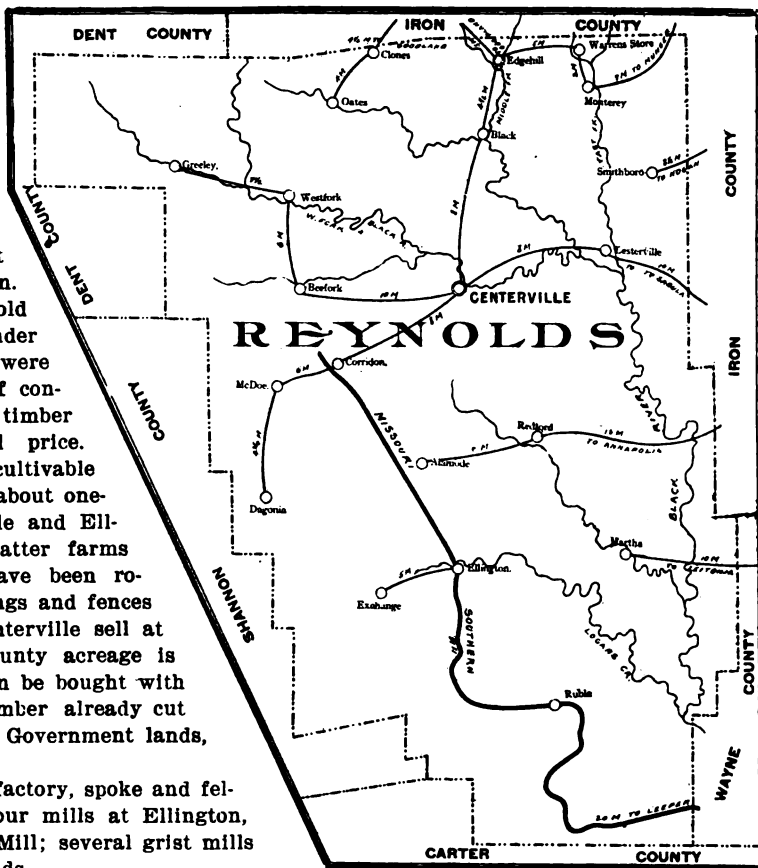
**LAND:**—There are 830 square miles, making 531,200 acres, of which less than one-tenth, 50,271 acres, is cultivable. Farms number 1,165, averaging 103.3 acres each in lands of various characters, valued at \$2,220,866 actual worth. As a whole the surface is mountainous. In a few localities there are quarter sections largely solid rock. Generally, however, surface bears small rocks. One-half the fifty thousand cultivable acres are river bottom land, rich, rock free, surprisingly well improved. Soil is clay, darker in bottoms.

REYNOLDS COUNTY'S 1902 CROP			
	ACRES	PRODUCT	VALUE
Corn	15,503	410,830 *	\$ 154,060
Wheat	2,782	41,730 *	24,820
Oats	808	17,960 *	5,985
Hay	7,457	10,440 †	93,960
Forage	1,275	1,485 †	7,425
Broom Corn	3	1,500 †	40
Clover Seed		40 *	220
Tobacco	41	20,110 †	2,910
Potatoes	328	20,520 *	14,170
Vegetables	280		13,065
<b>Total</b>			<b>\$316,455</b>
LIVE STOCK AND PRODUCTS			
KIND	NUMBER	VALUE	
Cattle	12,275	\$ 276,187	
Horses	2,112	126,720	
Mules	1,203	77,580	
Asses and Jennets	19	1,710	
Sheep	5,172	15,516	
Swine	20,823	208,230	
Chickens	38,553		
Turkeys	837	15,025	
Geese	2,346		
Ducks	2,414		
Swarms of Bees	577	939	
Honey	19,233 *	2,404	
Wool	13,100 †	2,183	
Milk	786,165 \$ †	58,190	
Butter	162,424 †		
Eggs	224,180 †	28,025	
<b>Total</b>		<b>\$812,709</b>	
* Bushels.	† Pounds.	Dozen.	
† Tons.	\$ Gallons.		

Photos in heading: Black River near Lesterville; Johnson's Shut-In.

Corn, grass, wheat and oats are raised in bottoms of Black river, Logan's Creek, Bushy Creek, Doe Run Creek, locations of principal farms. Farm lands under cultivation will average \$20 an acre. With this a timber area of equal extent of land bought would be gratuitously given. Recently a 1,000-acre farm sold for \$6,000; 250 acres were under cultivation. The 250 acres were priced at about full extent of consideration, the 750 acres of timber bringing a merely nominal price. One-fourth of the improved, cultivable land can be bought for \$10; about one-fifth, in vicinity of Lesterville and Ellington \$30 to \$40. These latter farms are well improved, crops have been rotated intelligently and buildings and fences are trim. Farms around Centerville sell at \$15 to \$25. One-half the county acreage is owned by mill men. This can be bought with pine privileges reserved or timber already cut for 75 cents to \$1 an acre. Government lands, 6,522 acres.

**MANUFACTORIES:**—A hub factory, spoke and felloe factory at Lesterville; flour mills at Ellington, near Lesterville and Carter's Mill; several grist mills and lumber mills at cross roads.



**TRANSPORTATION:**—Missouri Southern Railroad, narrow gauge, logging road with passenger accommodation, 37.17 miles taxable road. Sabula, in Iron county, on the Iron Mountain is passenger point for Lesterville and Centerville, the county seat.

**SCHOOLS:**—Fifty-three districts with school buildings and average six months term.

**ROD AND GUN:**—Many people fish and hunt along Black river and tributary streams. Red perch, catfish, goggle-eye and buffalo fish are plentiful. Deer, turkeys, squirrels, pheasants and other smaller game are found. Johnson's Shut-In is a favorite point for campers.

**TOWNS:**—Lesterville, Centerville and Ellington are chief. Trallaloo, fostered by Clarkson Saw Mill Company, of Leeper, has 200 inhabitants within a year of establishment.

**NEWSPAPERS:**—Centerville Outlook, Centerville Reformer.

IN THE  
WILD WOODS.





**T**HE Ripley county farmer is a manufacturer and a miner. In support of his table he tills the soil and pastures live stock upon the free range. For clothes and luxuries he depends well upon his broadaxe, with which he makes railroad ties, and his pickaxe, with which he soon collects a wagon load of iron ore for market. Ripley is upon the Arkansas border, sixty miles west of the Mississippi river. Its northern one-third is situated within Missouri's yellow pine belt. The south two-thirds bears hardwood timber. Its surface is rough, excepting 20,000 acres at the southeast corner which is of lowland character. County contains 640

square miles of land, 409,600 acres, of which 63,496 acres are in cultivation. There are 1,740 farms, averaging 91.8 acres, including land of all characters. They are estimated at \$2,585,848. Area of vacant land, 4,285 acres.

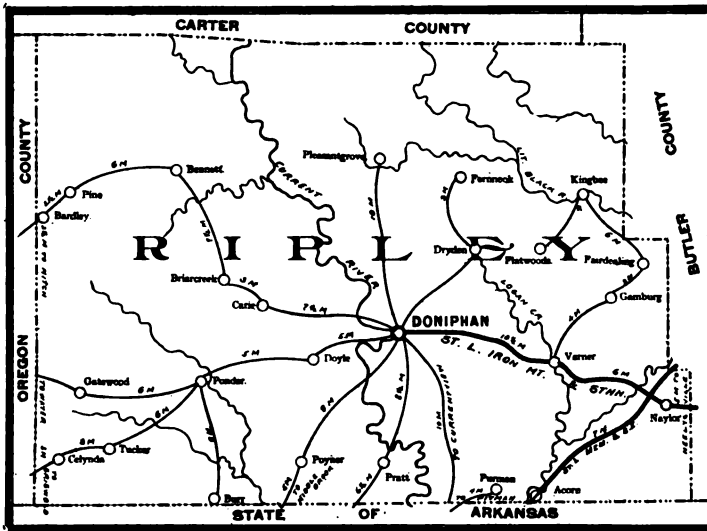
**POPULATION:**—White, 13,185; colored, 1; American born, 13,091; foreign born, 95; total, 13,186. Farm homes owned, 1,198; rented, 591; other homes owned, 309; rented, 504; total families, 2,602.

**FINANCE:**—County tax, 50 cents on one hundred dollars; school tax from 40 cents to \$1.25, average, 61 cents; total assessed valuation, \$2,445,280; assessed valuation per cent of actual valuation, 70 cents; county debt \$8,000; no township debt.

**TIMBER:**—Commercial timbers are yellow pine, white oak, black oak, red gum wood. These predominate, with hickory, elm, and in the lowlands, corkwood. One of the largest pine lumber mills in Missouri is located at Grandin, Carter county, at the north edge of Ripley. At this point and Doniphan most of Ripley's log output is shaped into boards, dressed and undressed. Estimated that Ripley's pine timber will last five years. Three saw mills at Doniphan and seven or eight portable mills are helping to convert pine and hardwood into cash. Cord wood, \$1.25; in the tree, free.

RIPLEY COUNTY'S 1901 CROP			
	ACRES	PRODUCT	VALUE
Corn	27,514	687,850 *	\$ 257,945
Wheat	7,031	77,340 *	45,630
Oats	2,631	55,915 *	18,660
Hay	3,366	4,900 †	49,000
Forage	1,310	1,520 †	7,660
Broom Corn	3	1,500 †	40
Grass Seed		75 *	165
Cotton	565	192,100 †	14,510
Tobacco	23	16,330 †	1,675
Potatoes	234	21,400 *	11,290
Vegetables	405		20,580
Total			\$ 427,035
LIVE STOCK AND PRODUCTS			
KIND	NUMBER	VALUE	
Cattle	9,140	\$ 223,500	
Horses	3,125	187,560	
Mules	1,514	90,840	
Asses and Jennets	22	1,960	
Sheep	3,929	11,787	
Swine	21,813	213,130	
Chickens	42,914		
Turkeys	787		
Geese	3,385	21,430	
Ducks	1,897		
Swarms of Bees	809	1,961	
Honey	26,987 †	3,371	
Wool	9,870 †	1,562	
Milk	1,093,404 †		
Butter	233,420 †	90,235	
Eggs	296,220 †	37,080	
Total		\$ 892,409	
* Bushels.	† Pounds.	Dozen.	
† Tons.	§ Gallons.		

Photo in heading: On Picturesque Current River, not far from Doniphan.



**MINERALS:**—Iron in every township. Also clay and limestone.

**LAND:**—Topography varies from lowlands in southeast to mountains in northwest. In the lowlands improved farms average \$25 an acre; unimproved \$5 to \$10. Cotton and corn are chief products. Westwardly and northwardly from lowlands hills are encountered. These grow higher and more abrupt until in the northwest they assume mountain importance. Wherever in vicinity of creeks they are rock covered. Eastern one-half is more thickly settled and better improved. Land in improved condition sells at \$20 up to \$30 in exceedingly rare instances, and improved hill farms are to be found at \$5 to \$10 an acre. Unimproved mountain land in tracts of less than three or four hundred acres is had at \$1.25 to \$2.50 an acre. As the timber is removed, mining is increasing, and this with fruit raising is the hope of the county. Berries ripen one week in advance of crops even further south, owing to hill protection from north. Peaches grow perfect.

**MANUFACTURED PRODUCTS:**—Railroad ties bring 26 cents in Doniphan, where annual shipments amount to half a million ties. Doniphan is location of two saw mills and one planing mill, grist mill, two roller flouring mills of 75 barrel capacities, small foundry, ice and cold storage plant and two stave factories. At Naylor is a 50 barrel flour mill; at King Bee a saw and planing mill.

**TRANSPORTATION:**—Frisco (Southern Missouri & Arkansas), 9.29; Iron Mountain (Doniphan branch), 15.93 miles of taxed roadbed.

**SCHOOLS AND CHURCHES:**—Doniphan has five churches; Naylor four. There are 68 school districts, averaging six months terms. Doniphan public high school of eight rooms contains laboratory for physics and chemistry and a reference library. School term 9 months. Course comprises: four years English, four years Latin, three of history, one of science. It is approved by University of Missouri.

**TOWNS:**—Doniphan, county seat, 1,500 inhabitants; new \$20,000 court house; \$15,000 water-works system. Naylor, Varner, Gatewood, Pine, Poyner, Fair Dealing, Ponder, Current View, King Bee; all supported by timber and farming.

**NEWSPAPERS:**—Doniphan Hustler, Prospect-News.

Mo.—32



DONIPHAN, RIPLEY COUNTY.





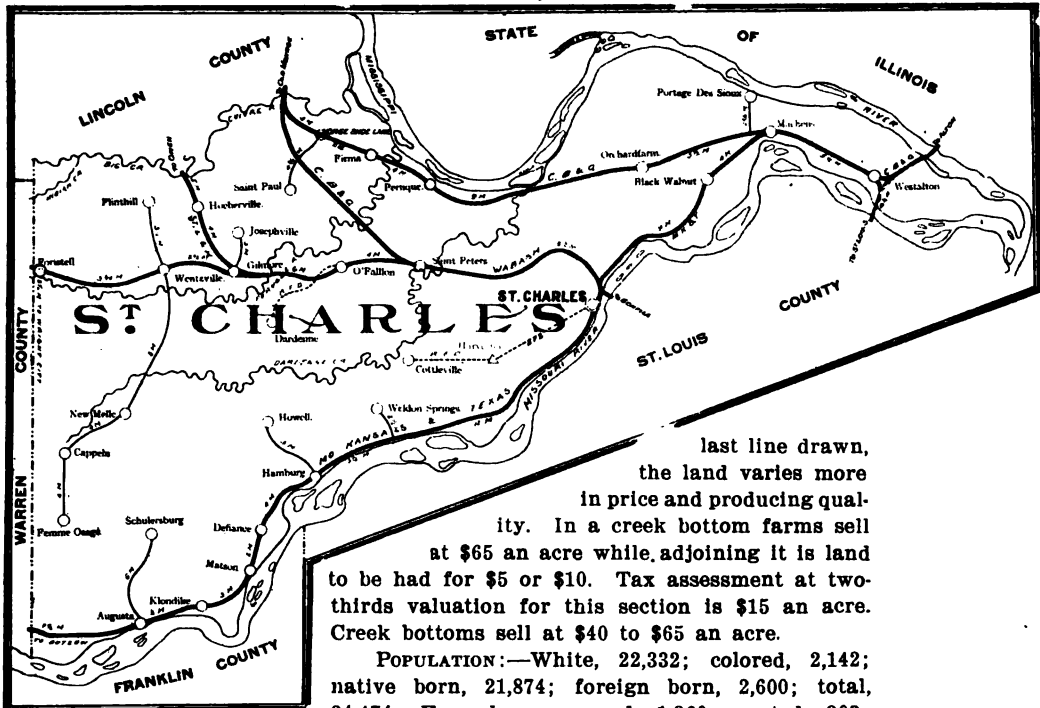
**S**T. CHARLES lies immediately north and west of the confluence of the Mississippi and Missouri rivers. Agriculture, manufacturing, horticulture and limestone are the elements of its commercial basis. Wheat and corn are the largest grain crops, and the county is first in onion production. St. Charles white corn for seed crosses the Atlantic annually. Best equipped car plant in the United States is located at St. Charles, the county seat. Three quarries ship immense quantities of blue limestone. In square miles the area is 520, or 332,800 acres, of which 220,491 are in actual cultivation. There are 2,297 farms, averaging 130.7 acres each in cultivable, pasture, and timber lands. Actual value of farm lands \$11,127,188. Originally hard wood timber, white oak, black oak, hickory, ash, walnut, elm, covered two-thirds area. One-third this former acreage, in western part of county and along the Mississippi river, remains; portable saw mills are found in the locality. Large numbers of railroad ties are being cut.

**BUILDING STONE:**—St. Charles county court house is monument to stone resources. Blue limestone is quarried along the Missouri river immediately south of St. Charles and at St. Peters. Fire clay is mined for car and foundry works. Pits are located four miles west of St. Charles.

**LAND:**—One-third is rich, alluvial bottom land. It is defined by the rivers and on the opposite sides by the Wabash railroad from St. Charles to St. Peters, thence by the St. Louis, Keokuk and Northwestern to Old Monroe. It may be subdivided into three parts: first, high bottom, representing one-half of the land, worth \$80 to \$125 an acre, according to improvements and altitude; second, lower bottom drained, embracing one-third of bottom land, \$50 to \$70; third, four thousand acres, approximately, of overflow land east of St. Peters, \$20 to \$25. If tiled, the latter division is as valuable as first. The next dividing line would be run through Melville, Wentzville, Mechanicsville and Hamburg, bounding the south and west land averaging \$60 an acre; this embraces one-third of the county. It is high-hill land, and the farms are in a high state of improvement. Perhaps a thousand acres within this strip are rocky, bluff land, and could be bought for \$20 to \$30; one-third would bring \$75 or \$80, best situated farms \$100. South and west of the

ST. CHARLES COUNTY'S 1902 CROP			
	ACRES	PRODUCT	VALUE
Corn	59,550	3,156,095 *	\$ 962,610
Wheat	75,590	2,039,310 *	1,223,585
Oats	11,465	458,560 *	114,640
Hay	16,145	32,295 †	209,920
Forage	645	750 †	3,750
Broom Corn	8	4,000 †	110
Clover Seed		2,200 *	13,300
Grass Seed		50 *	70
Tobacco	10	9,500 †	855
Potatoes	1,333	172,026 †	43,155
Vegetables	655		46,045
Total			\$2,618,070
LIVE STOCK AND PRODUCTS			
KIND	NUMBER		VALUE
Cattle	17,301		\$ 559,030
Horses	7,457		497,125
Mules	2,809		210,675
Asses and Jennets	77		7,700
Sheep	3,967		11,900
Swine	37,137		371,370
Chickens	218,511		
Turkeys	2,333		
Geese	2,261		97,490
Ducks	2,637		
Swarms of Bees	1,257		3,190
Honey	41,900 †		5,240
Wool	18,820 †		3,135
Milk	2,146,182 †		
Butter	346,975 †		156,220
Eggs	1,191,510 †		148,940
Total			\$2,072,025
* Bushels.	† Pounds.	Dozen.	
† Tons.	\$ Gallons.		

Photo in heading: St. Charles from the Missouri River.



last line drawn, the land varies more in price and producing quality. In a creek bottom farms sell at \$65 an acre while adjoining it is land to be had for \$5 or \$10. Tax assessment at two-thirds valuation for this section is \$15 an acre. Creek bottoms sell at \$40 to \$65 an acre.

POPULATION:—White, 22,332; colored, 2,142; native born, 21,874; foreign born, 2,600; total, 24,474. Farm homes owned, 1,360; rented, 903;

other homes owned, 1,223; rented, 1,336; total families, 4,822.

FINANCE:—County tax, \$33,242.67; school tax average, 28 cents; total assessed valuation, \$12,215,190; assessed valuation one-half of real valuation; no county debt; no township debt.

MANUFACTORIES:—St. Charles is a manufacturing city. American Car & Foundry Co., employing 1,700 men, make railway cars from the ground up. The plant covers seventeen blocks along the river and is thoroughly equipped. Wabash, and Missouri, Kansas & Texas systems are supplied from St. Charles shops. Cars are sent to every civilized country. Departments include brass and malleable iron foundries, wheel foundry, gray iron foundry, pattern shop, iron and machine shop, freight paint shop, coach wood machine shop, coach cabinet mill, coach erecting shop, coach paint shop, upholstering shop, mirror department, glass etching department, brass machine shop, brass finishing shop, brass lacquer and finishing department, coach blacksmith shop, lumber drying kilns, mechanical engineering department; organized 1873 and transferred to present corporation March 1, 1899. Capacity, 650 freight or thirty passenger coaches a month. Compressed brick plant, two stone quarries, cob pipe factory employing 60 persons, five cigar factories, two steam laundries, three wagon and carriage shops; creamery at New Melle; flouring mills at St. Charles, New Melle, Wentzville and O'Fallon.

TRANSPORTATION:—Wabash, 27.72; Missouri, Kansas & Texas, 43.80; St. Louis, Keokuk & Northwestern, 32.77; St. Louis & Hannibal, 5.77; St. Clair, Madison & St. Louis Belt Line, 2.80; St. Peters' branch St. Louis, Kansas City & Northwestern, 10.60 miles. Pike roads, 146; dirt, 660 miles.

SCHOOLS:—Lindenwood College, Presbyterian school for young women, founded 1830; enrollment, 74; faculty, 15. Collegiate, music, elocution, and dramatic art. Sacred Heart Convent, for young women; 65 enrolled. St. Charles Military Academy, for boys, preparatory school, St. Charles. Woodlawn Seminary, O'Fallon. High School, St. Charles. Seventy-one districts with one-third more schools.

NEWSPAPERS:—St. Charles Banner-News, Cosmos-Monitor, Demokrat; Wentzville Union; O'Fallon Hausfreund.



**S**T. CLAIR is situated on the west side of southern Missouri. It is fifty miles east of Kansas and seventy miles south of the Missouri river at Lexington. Agriculture, stock raising, and mining are principal occupations. Tomato growing, live stock ranches and lime manufacture give it feature. Ranch is applied in St. Clair county to half a dozen farms each of not more than five hundred acres, devoted to cattle or sheep raising. The owner places the property in the hands of an overseer, who lives upon the place and conducts the feeding of stock. The owner resides in town. North-west one-fourth of St. Clair county is prairie, commercial and industrial inter-

ests thereof centering at Appleton City, largest town, population 1,133. Osceola, upon Osage river, is county seat; population 1,037. Lowry City, in northeast, is best town in its section of the county. Lime is manufactured at Osceola.

**POPULATION:**—White, 17,645; colored, 262; American born, 17,590; foreign born, 317; total, 17,907. Farm homes owned, 1,925; rented, 866; other homes owned, 617; rented, 409; total families, 3,817.

**FINANCE:**—County tax: general revenue, 50 cents; road, 15 cents; sinking fund, 15 cents; total, 80 cents; school tax from 12 cents to \$2.40; average, 60 cents on one hundred dollars; assessed valuation: land and personal, \$3,521,545; merchants, \$114,980; railroads, \$511,640; total, \$4,481,165.16; assessed valuation per cent of actual value, 50; county debt, \$7,000, outstanding warrants; no township debt.

**TIMBER:**—Forty per cent of land originally timbered; white, black, and post oak, hickory, pecan, walnut, hackberry, mulberry, elm, sycamore, cottonwood, chiefly in east, southeast and along streams. Commercial size almost exhausted.

**MINERALS:**—Coal production, 3,139 tons annually; operated mines at Appleton City, Dottie, Lowry City, Iuka Springs, Monogaw Springs, Taberville, Tiffin and Osceola. Vein at Dottie, Taberville, Tiffin and vicinity of Lowry City is three to four feet thick; best deposits eight miles or more from railroad. Iron in northeast;

ST. CLAIR COUNTY'S 1902 CROP			
	ACRES	PRODUCT	VALUE
Corn	88,913	8,111,955 *	\$ 960,265.
Wheat	10,719	198,300 *	109,065
Oats	8,566	231,280 *	61,390
Hay	27,057	43,390 †	231,095
Forage	3,480	4,640 †	23,200
Flax	4,578	18,812 *	19,045
Broom Corn	745	409,750 †	11,270
Clover Seed		60 *	335
Grass Seed		1,600 *	2,560
Tobacco	26	16,900 †	1,690
Potatoes	652	61,940 *	21,680
Vegetables	1,230		56,185
Total			\$ 1,517,680
LIVE STOCK AND PRODUCTS			
KIND	PRODUCT	VALUE	
Cattle	27,359	\$ 890,770	
Horses	9,953	663,535	
Mules	1,711	119,770	
Asses and Jennets	83	8,300	
Sheep	5,092	15,065	
Swine	32,625	338,250	
Chickens	147,208		
Turkeys	3,760	111,245	
Geese	2,853		
Ducks	2,637		
Swarms of Bees	1,661	3,526	
Honey	56,693 †	7,004	
Wool	19,990 †	8,332	
Milk	2,780,584 ‡	153,825	
Butter	457,257 ‡		
Eggs	200,410	150,055	
Total		\$ 2,384,57	
* Bushels.	† Pounds.	Dozen.	
‡ Tons.	§ Gallons.		

Photo in heading: Rosemont Ranch on Sac River.

limestone and sandstone along Sac and Osage rivers. Whetstone deposits in pockets near Monegaw Springs; used for souvenirs of the resort. Kaolin and earth paint in west half of county. White clay analyzes 61 per cent silica and 28 per cent alumina.

**LAND:**—Area, 690 square miles; 441,600 acres; cultivated, 219,404 acres; number of farms, 2,851; average size, 121.9 acres; aggregate valuation, \$5,467,725. Entering at different points in the southwest corner of the county, two prongs of the Osage river very soon flow together and thence continue a northeasterly direction to the county line and into Benton county.

At Osceola, this stream is joined by Sac river, which enters St. Clair county at a middle point on the south border. Osage has approximately 65 miles and the Sac 27 miles of bed within the county. Northwest one-fourth of the county is undulating prairie. It is crossed by small creeks with narrow timber strips. Soil is uniformly prairie loam, black, with clay undersoil. Thin limestone rock is found at shallow depth. Bulk of prairie brings \$40 to \$50. One-fourth of it, embracing more creek, timber strips sell at \$20 to \$30. Along the main streams are bottom lands averaging three-eighths of a mile in width. Estimated at 25,000 acres. Soil is black, sandy, bottomless loam. Prices, \$40 to \$50 an acre. One-fourth of the county east of Sac and Osage confluence is cultivable farm lands, worth \$15 to \$25. Balance ranges from \$1.25 to \$10 an acre. Three thousand three hundred and twenty-five acres of government land are embraced. Wild land is clothed in blue stem grass.

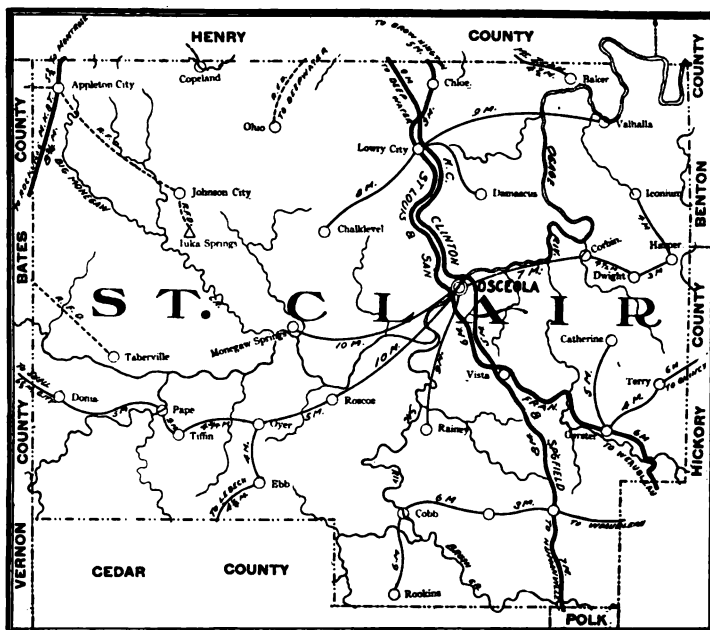
**MANUFACTURED PRODUCTS:**—Cheese, brick, and lime are manufactured. Appleton City has three cheese plants and creameries; Osceola two lime kilns.

**TRANSPORTATION:**—Missouri, Kansas & Texas, 6.75; Kansas City, Osceola & Southern, 26.91; Kansas City, Clinton & Springfield, 29.91 miles of taxed railroad. Last two lines are operated under Frisco leases. County roads cross rivers by five large steel bridges.

**SCHOOLS:**—Number of buildings, 114. High schools at Osceola, Appleton City. Appleton City Academy gives courses in primary, preparatory, academic, music, elocution, military and physical culture departments; 125 students.

**MINERAL SPRINGS:**—White and black sulphur, magnesia and various chalybeates, free and limestone waters. Monegaw Springs, Appleton City Springs, Taberville Springs, Chalybeate, Salt Creek and County Line Sulphur Springs are points of mineral water virtues. First two are provided with hotels which are patronized during summers. Fishing is good.

**NEWSPAPERS:**—Osceola Democrat, Republican; Collins Advance; Lowry City Independent; Appleton City Tribune, Journal.



OSAGE RIVER BRIDGE, OSCEOLA.



**C**ENTER of the far famed southeast Missouri lead mining and smelter district, is St. Francois county, forty-five miles south of St. Louis. Last year seventy per cent of the output of lead in Missouri was from this county. The developed district extends along the line of the Mississippi River & Bonne Terre railroad from Doe Run to Jefferson county. Iron mining is likewise an important commercial and industrial factor of the county. Its location is in the southwest corner, centering at Iron Mountain, which has yielded large annual outputs for many years. Some copper is mined also and baryta is found in the lead district. In other things St. Francois is not backward. All directions rock roads run out of Farmington, location of one State institution, the Hospital for Insane; Carleton College and Elmwood Seminary, and a thorough system of public schools. Bonne Terre, another leading town, location of one of the largest concentrating plants in Missouri, is seat of a high school approved by the University of Missouri. County embraces 410 square miles of land, 262,400 acres, of which 97,765 are devoted to agriculture. There are 1,277 farms, averaging 162.6 acres each in lands of cultivated, pasture, and timber character. Total value of farm lands, \$8,350,675.

**POPULATION:**—White, 23,440; colored, 611; American born, 23,136; foreign born, 915; total, 24,051. Farm homes owned, 900; rented, 390; other homes owned, 1,458; rented, 1,910; total families, 4,658.

**FINANCE:**—County tax, 40 cents; county road tax, 10 cents; school tax from five cents to \$1.30; average, 54 cents; total assessed valuation, \$6,357,942; based upon thirty per cent of actual value; no county nor township debt.

**TIMBER:**—Varieties: White oak, black oak, post oak, red oak, sugar maple, black walnut, elm, cherry, hickory, black gum, pine, pawpaw. Red and black oak comprise one-half. Wherever accessible to railroad the largest timber has been removed. White oak represents one-fourth of timber growth, but has been cut over more than any other sort. Large growth white oak is yet found in rough regions touching Big river in north, and St. Francis river in south and southwestern corner of county. In the western and southern portions, sugar maples are numerous. Pine equal to two per cent of timber remains in districts remote from railroads.

ST. FRANCOIS COUNTY'S 1903 CROP			
	ACRES	PRODUCT	VALUE
Corn	20,548	698,564 *	\$ 261,990
Wheat	14,410	230,560 *	136,030
Oats	2,511	62,775 *	20,925
Hay	11,834	17,750 †	177,500
Forage	3,310	3,800 †	19,300
Broom Corn	5	2,500 †	70
Clover Seed		125 *	690
Tobacco	18	12,780 †	1,280
Potatoes	505	45,450 †	21,815
Vegetables	525		36,350
Total			\$675,920
LIVE STOCK AND PRODUCTS			
KIND	NUMBER		VALUE
Cattle	13,021		\$ 325,525
Horses	3,427		205,620
Mules	1,295		84,175
Asses and Jennets	15		1,350
Sheep	3,547		10,641
Swine	12,971		129,710
Chickens	54,344		
Turkeys	1,629		36,910
Geese	1,376		
Ducks	1,060		
Swarms of Bees	796		2,084
Honey	26,533 †		3,317
Wool	12,590 †		2,098
Milk	1,358,211 †		99,145
Butter	268,963 †		
Eggs	347,350 †		43,420
Total			\$943,995
* Bushels.	† Pounds.	Dozen.	
† Tons.	\$ Gallons.		

Photos in heading: Lead Mining District; Columbia Lead Company, Shaft No. 2.

**MINERALS:**—More than two-thirds of county area has mineral prospects. One-tenth of prospects are developed. Minerals consist of lead in form of disseminated ore, zinc, iron, barite, nickel, red and gray granite, limestone, and sandstone. Copper is mined in small quantity.

**LAND:**—There are two classes: first, the rough hill land found in a large area in southwestern corner, and the broken regions adjacent to principal streams; and the gently rolling areas in the eastern and central parts of the county. The latter class, which embraces the plateaus and upland valleys, is quite free from stones and of sufficient fertility to support every kind of crop. The native growth of linden, elm, paw-paw and like vegetation is indicative of its richness.

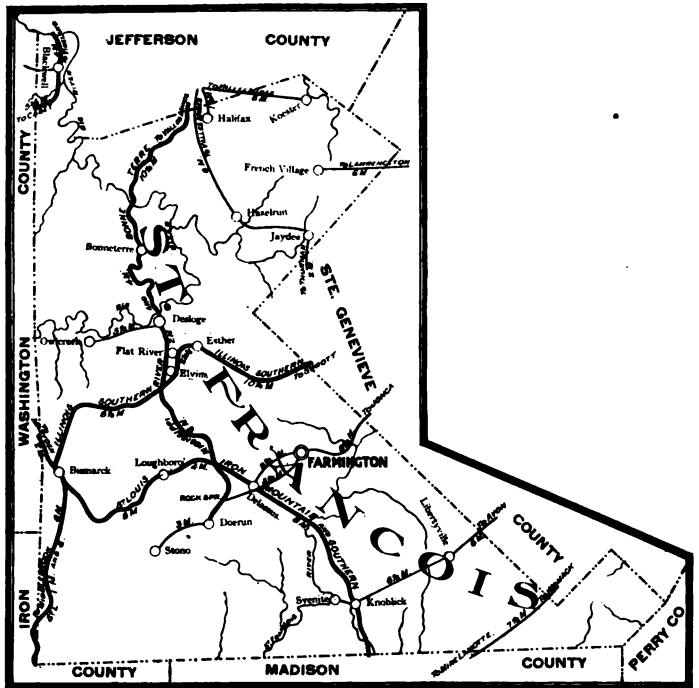
Poorest land amounts to only about five per cent and is in southwest corner, priced at \$5 an acre. The average unimproved land of southern end of county may be bought for \$10 an acre, and the best, amounting to twenty per cent, lying between French Village and Libertyville, will bring \$12 to \$15 an acre. Of the improved lands, the best is situated in the eastern part and along streams elsewhere; prices range from \$15 to \$20. Ridge lands are sometimes found at \$5 to \$10 an acre, intervening strips of more even and higher priced areas. Major portion of county is exceptionally well adapted to fruit growing, soil being deep, and subsoil of red, porous clay.

**MANUFACTORIES:**—Flouring mills, wagon and machine shops, nurseries, saw mills, creamery, bottling works, planing mills, ore reduction works, granite quarries and brick works.

**TRANSPORTATION:**—Iron Mountain railroad, main line and Belmont branch; Missouri Southern, and Mississippi River & Bonne Terre. Thirty miles of rock roads in county.

**TOWNS:**—Farmington, county seat, 1,778; three flouring mills, wagon and machine shop, bottling works, saw mills, large nursery, Carleton College and Elmwood Seminary, State Insane Asylum. Bismarck, 708, division point. Knob Lick, 209; Bonne Terre, largest town, but unincorporated, location of concentrating plant, creamery, flouring mill, wagon factory. Doe Run, terminus of Bonne Terre railroad, mining town with large concentrating plant. Libertyville, mining district, population 15,000, embracing Flat River, Elvins, Desloge, Cantwell, Esther, Huntington, Central and St. Francois.

**NEWSPAPERS:**—Farmington Times and Herald; Progress, News; Bonne Terre Star, Democrat-Register; Flat River Lead Belt News; Elvins Argus.





**F**IFTY miles south of St. Louis, upon the Mississippi river, is Ste. Genevieve county, seat of the first settlement in Missouri. Its contributions to the history of the State thus began early and have ever since extensively continued. The Catholic church exerts a strong influence from this center. Commercially and industrially the county is varied. Aux Vases sandstone is an export item of importance. Abutments for Eads Bridge at St. Louis were quarried here. A large deposit of sand suitable for glass manufacture is found. Agriculture occupies 94,600 acres of cultivated land. County exports pecans. Wine making is incident to farm life. There are 450 square miles of land surface, equivalent to 288,000 acres. Farms number 1,364, averaging an acreage of 169 in total of cultivated, pasture and timber lands.

The actual aggregate value of farms is estimated at \$2,766,934.

**POPULATION:**—White, 9,885; colored, 474; American born, 9,859; foreign born, 500; total, 10,359. Farm homes owned, 1,149; rented, 215; other homes owned, 335; rented, 245; total families, 1,944. Foreign population is German and French.

**FINANCE:**—Total assessed valuation, \$2,136,535; assessed valuation per cent of actual valuation, 66 2-3; no county nor township debt.

**TIMBER:**—Sixty-five per cent of county is timbered. Black oak represents thirty-five per cent thereof; white oak, twenty per cent; post oak, fifteen per cent; walnut, hickory, and pecan, bearing abundance of fruit, represent the remainder. Walnut and pecans are mainly along Mississippi river and inflowing streams. Black oak is in south and southwest; white oak upon north hillsides, and post oak grows throughout the county.

**MINERALS:**—Copper, lead, zinc, iron, glass sand, kaolin, marble, and building stone are commercially utilized. Copper is mined in the eastern portion near the county seat. Disseminated lead was mined in Salline township in south Ste. Genevieve county, and zinc is found in Jackson township. Building stone quarries are located eight miles south of Ste. Genevieve city; product classed first rank. Antique marble is found

STE. GENEVIEVE COUNTY'S 1902 CROP			
	ACRES	PRODUCT	VALUE
Corn	18,356	578,214 *	\$ 216,890
Wheat	38,870	541,920 *	319,735
Oats	2,114	50,735 *	16,910
Hay	7,798	11,695 †	146,190
Forage	1,480	1,670 †	8,350
Broom Corn	7	3,500 †	95
Clover Seed		525 *	2,890
Tobacco	12	8,520 †	850
Potatoes	585	58,500 *	28,080
Vegetables	905		25,695
<b>Total</b>			<b>\$ 765,625</b>
LIVE STOCK AND PRODUCTS			
KIND	NUMBER		VALUE
Cattle	10,294		\$ 257,350
Horses	3,586		215,160
Mules	1,076		64,560
Asses and Jennets	20		1,800
Sheep	3,545		10,635
Swine	20,946		209,460
Chickens	60,562		43,965
Turkeys	1,636		
Geese	2,210		
Ducks	1,007		
Swarms of Bees	546		841
Honey	18,200 †		2,275
Wool	13,170 †		2,195
Milk	832,130 †		62,940
Butter	126,763 †		42,135
Eggs	337,060 †		
<b>Total</b>			<b>\$ 913,613</b>
* Bushels.	† Pounds.	‡ Dozen.	
† Tons.	‡ Gallons.		

Photos in heading: Farm Scene; Catholic Church, Ste. Genevieve.

near central part of county, ten miles from Ste. Genevieve. Glass sand deposit extends in a ridge seven miles long, near the eastern boundary. Granite and kaolin are found on railroad between Ste. Genevieve and Farmington. Red and gray granite and oolitic limestone are found in western part of county.

**LAND:**—Best land is adjacent to the Mississippi river and the Saline and Aux Vases creeks. It sells at \$50 to \$75, and where close to market occasionally brings \$100 an acre. Uplands are above the average hill land for general farm crops, but there is some land rough and too rock-bearing for profitable cereal culture. Best upland improved is priced at from \$15 to \$20; the next grade, \$10 to \$15 an acre. Best class of upland, timbered and unimproved, is yet to be had at \$5 to \$10 an acre. There are 2,092 acres of land owned by the United States government, awaiting homestead, at \$1.25 an acre. It is located mainly in the south, southeast and western portions.

**FRUIT:**—All land in Ste. Genevieve county excepting the river and creek bottoms, is eminently adapted to fruit growing. Upland regions of Saline and Aux Vases creeks are specially favorable to apples, peaches, pears, grapes and berries. Frisco railroad, just opened direct to St. Louis, means development in this line.

**MANUFACTORIES:**—Flouring mills are chief. About one hundred thousand dollars worth of surplus wheat is raised annually. Saw mills, brick yards, lime kilns, brewery, soda water factory, ice plant, cigar factories, creameries, are main supports of a large inhabitation. There are some small nurseries and every farmer grows grapes for table wines.

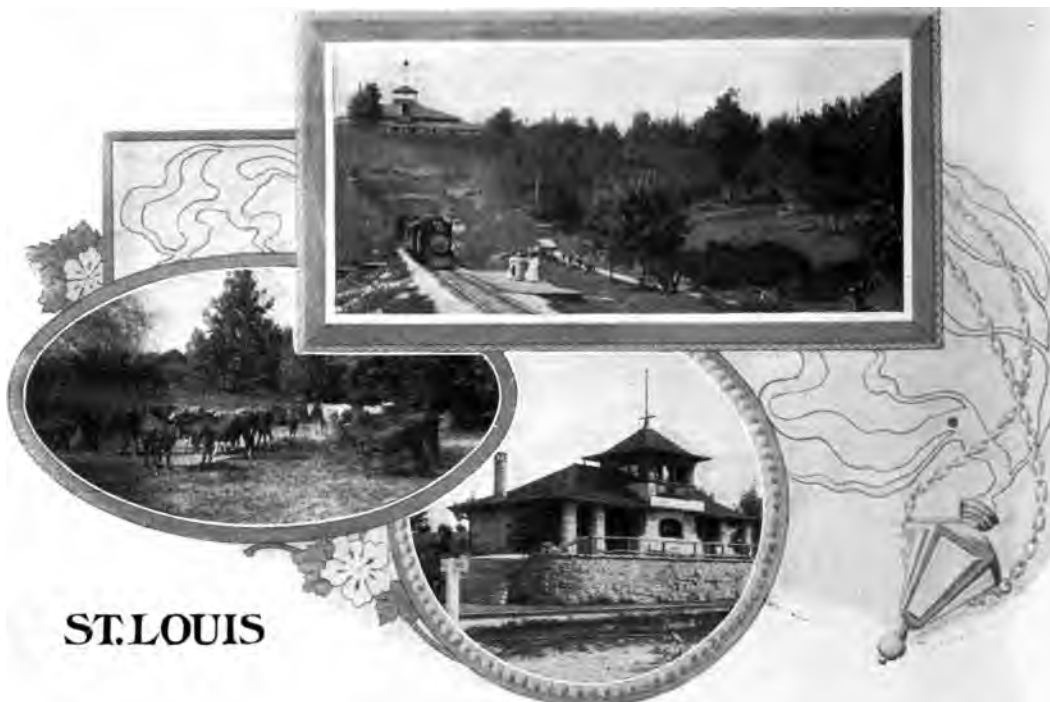
**TRANSPORTATION:**—Facilities have been trebled within the past year. Frisco has opened a road giving direct connection with St. Louis, broadening Ste. Genevieve markets. This is in addition to a branch line of the Missouri Pacific which connects with main line at Elvins. Steamboat service transports heavy freight from up and down the river, making Ste. Genevieve a distributing point for an inland area.

**TOWNS:**—Ste. Genevieve, 1,707 population: two flouring mills, two cigar factories, ice plant. St. Marys, population 576; flouring mills and general trading center. Bloomsdale, flouring mill, stock center. River Aux Vases, Offenber, Weingarten, Avon, Lawrenceton, and Zell.

**NEWSPAPERS:**—Ste. Genevieve Fair Play, Herald, News; St. Marys Progress, Times.







**S**T. LOUIS is a county of homes. It bounds the north, west and south limits of St. Louis city, metropolis of the Mississippi Valley, fourth city in size in the United States. The suburban feature is its first claim. Kirkwood, Webster Groves, Ferguson, Florissant, Maplewood, Clayton, are homes to an inhabitation having professional occupation in St. Louis city. DeHodiament, Wellston, Bridgeton, Valley Park, Fenton, Luxemburg, Glencoe and Centaur are towns of agricultural and manufacturing importance. Meramec Highlands is a summer resort, having hotel and cottages. Truck gardens and small poultry farms are many. County has 250 miles of graveled roads.

**POPULATION:**—White, 46,511; colored, 3,529; American born, 42,680; foreign born, 7,360; total, 47,040. Farm homes owned, 2,205; rented, 1,723; other homes owned, 2,877; rented, 2,817; total families, 9,622.

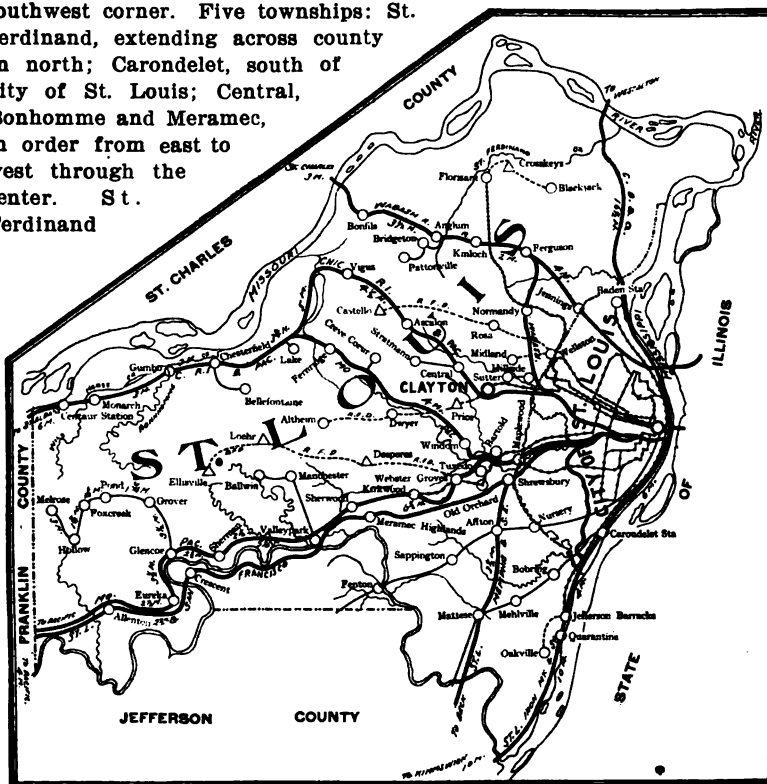
**FINANCE:**—County tax, 35 cents on one hundred dollars valuation; school tax, 10 cents to \$1.05; average, 39 cents; total assessed valuation, \$36,016,799; two-thirds actual valuation; no county nor township debt.

**LAND:**—Area, square miles, 492; acres, 314,880; number of acres cultivated, 206,863; number of farms, 3,908; average size, 64.8 acres; estimated actual value of farms, \$32,607,621. River bottom lands, approximating fifty thousand acres, lie adjacent to confluence of Missouri and Mississippi rivers; on Missouri river, east of St. Charles, extending interiorward to Florissant; in a strip one mile wide adjoining for eight miles the Missouri river south and west of the city of St. Charles; and upon Meramec river, where bottom ranges up to a mile in width. Fertility of Meramec bottom land equals that of the other bottoms. Bluffs adjoin Mississippi river south of St. Louis. Balance of St. Louis county is upland, shading to the mountainous in extreme

ST. LOUIS COUNTY'S 1902 CROP			
	ACRES	PRODUCT	VALUE
Corn	44,323	2,216,150 *	\$ 831,065
Wheat	51,891	1,349,105 *	796,005
Oats	3,381	98,050 *	31,685
Hay	24,652	49,315 †	690,270
Forage	7,405	8,640 †	43,200
Broom Corn	8	4,000 †	110
Clover Seed		125 *	660
Tobacco	2	1,420 †	140
Potatoes	7,611	951,375 *	456,660
Vegetables	6,925		452,085
Total			\$ 3,302,900
LIVE STOCK AND PRODUCTS			
KIND	NUMBER	VALUE	
Cattle	12,865	\$ 401,862	
Horses	8,561	570,733	
Mules	4,052	283,640	
Asses and Jennets	15	1,500	
Sheep	1,719	5,157	
Swine	22,490	224,960	
Chickens	207,803		
Turkeys	1,475	114,190	
Geese	1,495		
Ducks	2,806		
Swarms of Bees	1,201	3,093	
Honey	40,083 †	5,001	
Wool	7,075 †	1,195	
Milk	1,376,310 \$	471,210	
Butter	780,006 †		
Eggs	1,118,063 †	139,755	
Total		\$ 2,222,399	
* Bushels.	† Pounds.	Dozen.	
† Tons.	\$ Gallons.		

Photos in heading: Meramec Highlands; Evening in the Meramec Valley; Missouri Pacific Railway Station.

southwest corner. Five townships: St. Ferdinand, extending across county on north; Carondelet, south of city of St. Louis; Central, Bonhomme and Meramec, in order from east to west through the center. St. Ferdinand



contains a large portion of the finest agricultural bottom lands along the Missouri and Mississippi rivers. It also adjoins St. Louis city. Prices are as follows: One-fifth nearest St. Louis, \$250 an acre; two-fifths at \$150, and two-fifths at \$100. Carondelet township adjoins St. Louis on south; embraces Mississippi bluffs and rolling surface back thereof. Prices: Nearest city, one-fifth, \$300; three-fifths, \$150; one-fifth, \$75 an acre. Central defines highest priced land, adjoining city on west and held in small lots by speculators; middle one-third occupied by truck gardens; in extreme west strip are few forty to eighty-acre farms, cheapest at \$100 an acre. Highest price yet paid, \$7,000 an acre. Clayton, county seat, here located, surrounded by farm of 460 acres, which can not be bought in small tracts. Surface is that of long, rolling hill land. Bonhomme adjoins Central on west. Average price of land, \$75 an acre. Embraces Creve Coeur lake, favorite resort for St. Louisans. In vicinity of lake good bottom farms bring \$100 to \$125 an acre. Few tracts adjoining Missouri river may be had at \$35 to \$45. General topography, high, clay hills. Meramec, extreme west, has eight square miles of Missouri river bottom, worth \$55 to \$65, all in cultivation. Meramec river bottom likewise improved, farms sell at same prices. Most of this township is broken to point of mountainous. Small acreage, \$10 an acre; one-half of it unimproved, at \$20; one-fifth valley farms, near railroad, \$100; ordinary farm land, \$30 to \$40. Hills bear gravel. Location of peach orchards.

**GLASS AND LIME:**—Plate glass is made at Valley Park; lime kilns burn at Glencoe and Centaur. On smaller scale dairy products, wagons and buggies, soda water plants, canning factories operate. Flouring mills use local wheat.

**MINERALS:**—Fire clay, kaolin worked extensively in central portion. Sand taken from Meramec is coarse and sharp; forms large industry. Stone taken from Mississippi bluffs made into cement. Lime is also made therefrom.

**NEWSPAPERS:**—Clayton Argus, County Watchman-Advocate; County Waechter. Kirkwood Courier; Wellston Herald; Maplewood: Suburban Home Journal.



**S**ALINE, land of agriculture, raises annually eight million bushels of corn crop and in use of this immense yield its local live stock requirements for feed equal those of any other Missouri county. Saline is situated in a broad bend of the Missouri river, upon the south side, sixty miles east of Kansas City. Accretions of years account for one hundred miles of continuous river bottom, estimated at 125,000 acres. There are 760 square miles of land surface, equal to 486,400 acres, of which 384,236 acres are cultivated. Farms average 120.7 acres; number of farms, 3,638; aggregate value, \$18,974,190.

**POPULATION:**—White, 28,939; colored, 4,764; American born, 32,721; foreign born, 982; total, 33,703. Farm homes owned, 2,312; rented, 1,312; other homes owned, 1,835; rented, 1,561; total families, 7,020. Population of German and German descent largely in southwest and northeast sections.

**FINANCE:**—County tax, 50 cents on one hundred dollars valuation; school tax, average, 50 cents; total assessed valuation, \$11,452,970; assessed valuation per cent of real valuation, 40; no county debt; township debt, \$25,000.

Timber originally skirted Missouri river in strips one hundred yards to one mile in width, and in narrower average along Blackwater and Saltwater cheeks. It

occupied one-tenth surface in heavy growths of cottonwood, oaks, walnut, hackberry, hickory, elder. Hill timber was principally hickory and of less large growth.

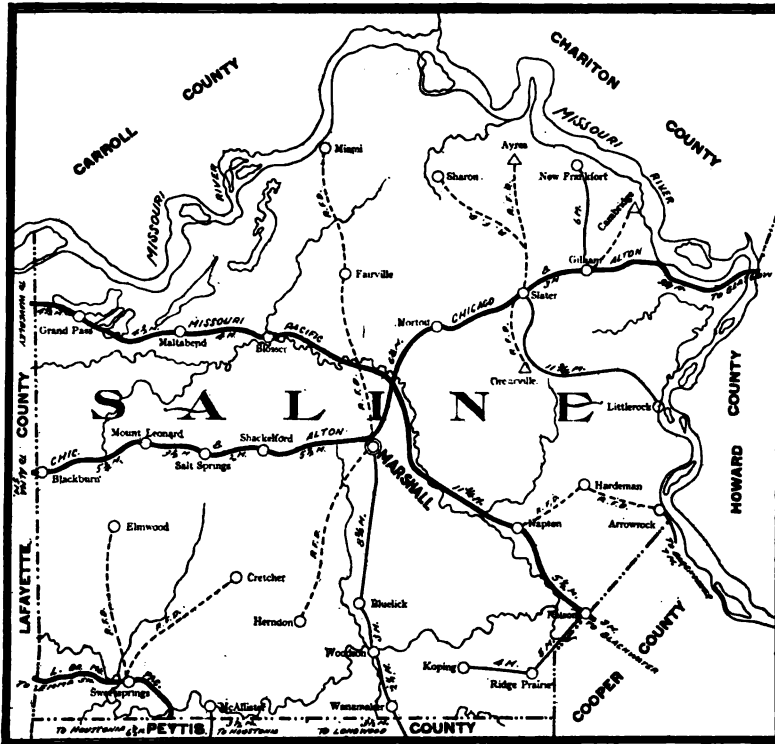
Near Napton coal mines supply local demands.

Sea is too small for profitable competition.

**LAND:**—Basis of county's notable wealth. Considered generally, Saline county is a high rolling prairie, with bottom lands on north, bounded by bluffs of limestone character. Bottoms range one to three miles in width, extending along river front of one hundred miles. Back of the first bottom is a second higher bottom land extending from Miami to Malta Bend, embracing twelve thousand acres, approximately. It is called Ptetesaw Plain. This plain includes the highest priced agricultural land in Missouri. Centered by the Chicago & Alton railroad, through the county east and west is an eight-mile strip of high prairie, exceptionally fertile. In southeast the streams cause land to be less level; even broken immediately upon the courses. Soil is here less deep—six inches on hill summits, to three feet upon less higher places—though still of "Saline fertility." Northwestern one-third of Saline brings \$75 to \$100 an acre, most of the farms selling at \$80 to \$90. Highest price yet paid was \$131 an acre. East of this the per acre price is \$60 to \$70. South of the strip of ridge land centered by the Chicago & Alton railroad, prices range from \$35 to \$60; averaging \$40 to \$50 an

SALINE COUNTY'S 1902 CROP			
	ACRES	PRODUCT	VALUE
Corn	169,400	8,046,500 *	\$2,373,720
Wheat	50,345	1,394,615 *	767,035
Oats	7,755	232,650 *	61,650
Hay	31,684	63,370 †	443,590
Forage	4,420	5,525 †	27,625
Flax	6	36 †	35
Broom Corn	146	73,000 †	2,010
Clover Seed		440 *	2,465
Grass Seed		180 *	325
Tobacco	104	72,800 †	6,915
Potatoes	1,259	157,375 *	50,360
Vegetables	1,295		68,045
<b>Total</b>			<b>\$3,803,775</b>
LIVE STOCK AND PRODUCTS			
KIND	NUMBER	VALUE	
Cattle	49,499	\$1,608,715	
Horses	14,776	985,065	
Mules	6,713	503,475	
Asses and Jennets	151	18,120	
Sheep	4,820	14,460	
Swine	91,103	911,030	
Chickens	214,953	176,580	
Turkeys	7,541		
Geese	4,064		
Ducks	3,140	5,510	
Swarms of Bees	2,712		
Honey	90,400 †	11,300	
Wool	22,360 †	3,725	
Milk	9,311,895 §	210,665	
Butter	579,885 †	140,315	
Eggs	1,121,740		
<b>Total</b>		<b>\$4,594,980</b>	
* Bushels.	† Pounds.	Dozen.	
‡ Tons.	§ Gallons.		

Photo in heading: On Farm of E. B. Wright, Mt. Leonard.



acre. Representative farm home costs \$1,800; fencing, wire; farm implements are modern; every farmer raises cattle, which account for an annual exportation exceeding one and one-half million dollars.

**FLOUR:**—Constitutes the only mill product. Wheat acreage is vast, hence the location of flouring mills in nearly every town and village.

**TRANSPORTATION:**—Chicago & Alton, 38.808; Missouri Pacific, Lexington branch, 7; Missouri Pacific, Jefferson City & Boonville, 35.42 miles of taxed road-bed. Marshall, chief town, is within three hours of Kansas City; half a night of St. Louis, and one night of Chicago.

**MISSOURI VALLEY COLLEGE:**—Co-educational institution ranking with best colleges of the west. Auspices of Cumberland Presbyterian church. St. Xavier's Academy, conducted by Catholic church. Both schools located at Marshall. High schools are inducements offered by half a dozen leading towns.

**SAPPINGTON SCHOOL FUND:**—This is a fund established 1853 by Dr. John Sappington, a Saline citizen, for assistance to children in educational need. It now amounts to \$53,700.

**MINERAL SPRINGS:**—There are many salt springs. Sweet Springs, because of its salt water springs, is a popular summer resort; Big Salt Spring, seven miles west of Marshall, is seventy feet in diameter; McAllister Spring, on Blackwater, and Sulphur Spring, on Cow Creek.

**Towns:**—Marshall, Miami, Gilliam, Slater, Sweet Springs, Blackburn, Arrow Rock, and Malta Bend. Marshall, county seat, population, 5,086; modern improvements, including asphalt streets, sewerage, waterworks, electric lights, gas. Slater is Chicago & Alton division point; Sweet Springs is characterized by its salt springs. All towns are agricultural and live stock centers.

**NEWSPAPERS:**—Marshall Index, Democrat-News, Citizen, Progress, Republican; Miami News; Slater Rustler; Gilliam Globe; Arrow Rock Statesman; Sweet Springs Herald; Blackburn Record; Malta Bend Qui Vive.



**B**ORDERING Iowa, third west of Des Moines river, is Schuyler, county agricultural. In land and land production diversity is marked.

It embraces prairie, and bluffs. It produces tobacco, and coal. Chief among its values is live stock:

cattle, horses and mules, swine, sheep, in order named. For comparison, however, sheep raising, dairying, tobacco and grass growing, pickle manufacturing and woolen mills may be mentioned. During the recent British-Boer war, Lancaster, county seat, became an important horse and mule market for a large section extending into Iowa and Illinois. Apple orchards are an asset of every farm; one of these contains seventy-five acres. Farms are valued at \$4,375,731. They number, 1,645, of an average acreage of 120, including land of cultivated, pasture and timber types. The plow lands are 162,867 acres, out of a total of 215,040 acres embraced within the county's 336 square miles of land surface.

**POPULATION:**—White, 10,840; colored, 0; American born, 10,625; foreign born, 215; total, 10,840. Farm homes owned, 1,235; rented, 379; other homes owned 428; rented, 299; total families, 2,341.

**FINANCE:**—County tax, 50 cents on one hundred dollars; school tax, average, 46 cents; total assessed valuation, \$3,171,126; assessed valuation one-third actual valuation. County debt, \$99,500; township debt, \$3,500.

**TIMBER:**—Four-fifths originally; three-fourths thereof has been removed. Timber embraced all except the prairie ridge, which is now traced by Wabash railroad. Species are elm, oaks, hickory, in the east half; western one-half was largely white oak, with scattering elms, birch, maple and walnut. Largest timber enclosures now to be found are forty acres. Threshing machine engines operate saw mills in making firewood and occasionally lumber.

**COAL:**—Two seams, forty-two to forty-six inches in thickness, twenty-five to forty feet beneath the surface. Last annual production, 3,373 tons. Fields have just recently been opened by Iowa Central railroad. This year's output will exceed beyond comparison. Chief mines are near Zola and Queen City, seeming to follow Chariton river. Sand for local building purposes is obtained upon Chariton river.

SCHUYLER COUNTY'S 1902 CROP			
	ACRES	PRODUCT	VALUE
Corn	42,580	1,881,415 *	\$ 585,580
Wheat	2,475	56,925 *	34,155
Oats	4,840	115,085 *	21,760
Hay	33,270	49,910 †	269,515
Forage	3,745	4,370 †	21,850
Flax	2	14 *	15
Broom Corn	2	1,000 †	80
Grass Seed		10,435 *	14,610
Tobacco	164	155,800 †	14,020
Potatoes	343	42,875 *	10,720
Vegetables	585		20,340
<b>Total</b>			<b>\$995,595</b>
LIVE STOCK AND PRODUCTS			
KIND	NUMBER		VALUE
Cattle	22,195		\$ 721,335
Horses	6,985		405,665
Mules	899		67,425
Asses and Jennets	15		1,500
Sheep	27,092		81,275
Swine	23,912		239,120
Chickens	88,920 †		
Turkeys	4,785		101,810
Geese	2,068		
Ducks	1,365		
Swarms of Bees	1,598		4,985
Honey	52,767 †		6,595
Wool	107,225		17,870
Milk	1,597,048 †		90,625
Butter	306,034 †		67,390
Eggs	538,660 †		
<b>Total</b>			<b>\$1,865,485</b>
* Bushels.	† Pounds.	Dozen.	
† Tons.	§ Gallons.		

Photos in heading: Tobacco Fields and Tobacco Barn.

**LAND:**—Prairie, crossing the county north to south along the longitude of the Wabash railroad, spreading in the vicinity of Queen City, together with considerable undulating land near Vinita, covers one-fifth of Schuyler county's surface. Adjoining Queen City are some finely improved farms, which would bring \$60 to \$70; per cent, however, is small. Best improved hill farms, the higher one-half of the fifteen thousand acres of bottom land, and the representative, well improved prairie farm of more than a mile and one-half from town, may be bought for \$40 to \$50 an acre. Along the Chariton river, which bounds Schuyler on the west, twenty thousand acres include some land which would wash away if plowed. It originally grew a dense forest of white oak timber. Land may be bought for \$17.50 to \$22.50 an acre. Estimated that one-half of the farms in the county sell at \$35 to \$40 an acre. Blue grass is indigenous. Soil on prairie is a vegetable loam, black, one to four feet in depth. On hills it is less deep, of much similar character. In valleys soil is, of course, alluvial, caused from overflows of a day's duration.

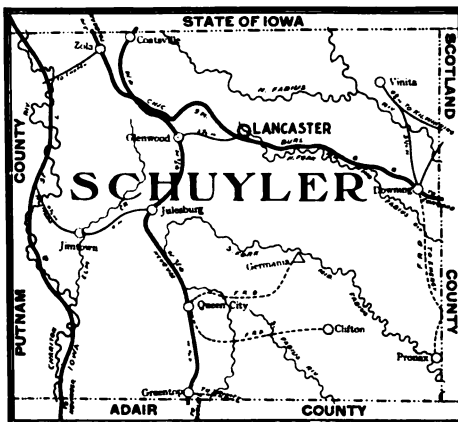
**MANUFACTORIES:**—Foundry, at Queen City, makes cane mills, stationary steam engines, and farm implements; a woolen mill, with \$30,000 worth of machinery, has operated for years; flouring mill and creamery. Lancaster has flouring mill and pickle factory; Downing a flouring mill and creamery; Glenwood a mill.

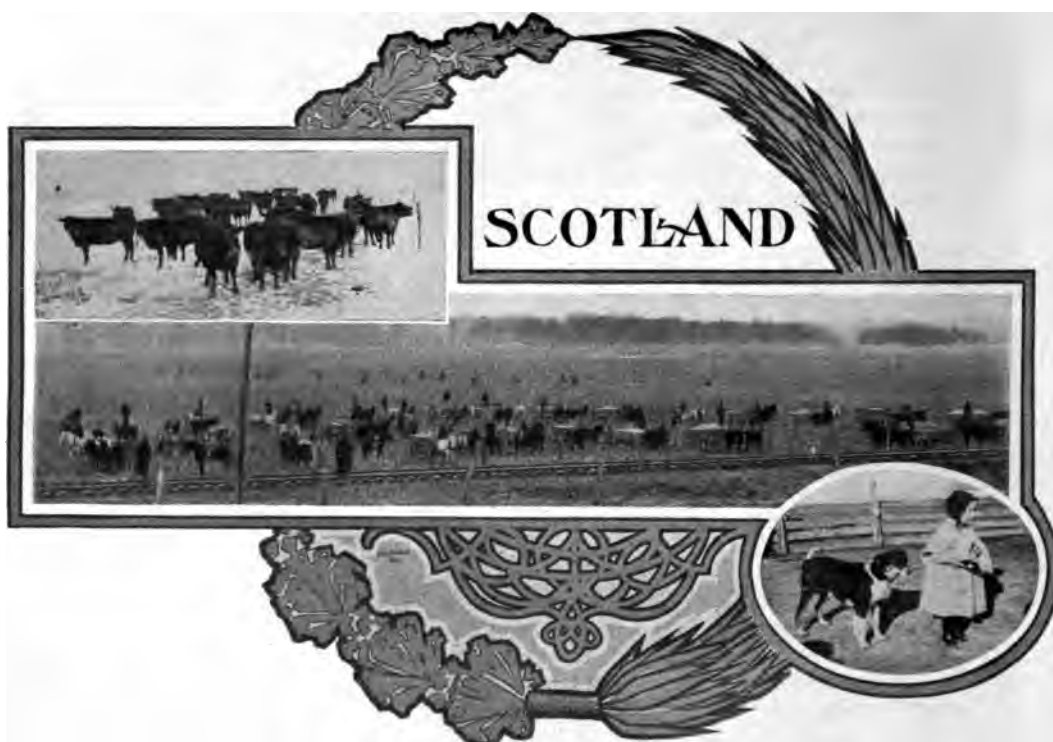
**TRANSPORTATION:**—Wabash railroad, Moberly to Des Moines, 20.05; Keokuk & Western, 19.57; Iowa Central, 4.32, miles taxed roadbed within the county.

**HIGH SCHOOLS:**—Lancaster High School is approved by the University of Missouri. School building has seven rooms, modern; Queen City High School has six rooms; Glenwood and Downing have graded systems, employing four teachers each.

**TOWNS:**—Lancaster, county seat, population 980; hill town; court house costing \$35,000, in center square. Queen City, 770 inhabitants; prairie town and shipping point, on main line of Wabash railroad. Downing, 501; Glenwood, 434; Green Top, 284; all are supported by farming.

**NEWSPAPERS:**—Lancaster Excelsior, Republican; Queen City Leader, Transcript; Glenwood Phonograph; Downing News.





**S** COTLAND is on the Iowa border, the second county west of the State line. While it is devoted to general agriculture, cattle raising and vegetable growing are marked industries. For each farm in the county \$550 worth of cattle values exist. Twelve and one-half thousand horses, and mules

are to be found upon the farms. Like several counties in this section, Scotland grows and pickles a large quantity of cucumbers.

There are 440 square miles of land surface, 281,600 acres, of which 222,498 acres are under plow or otherwise highly improved. There are 2,118 farms averaging in size 131.1 acres, of an actual valuation of \$6,479,190. The live stock values and agricultural products each year nearly equals the aggregate of farm values. The land is generally prairie.

**POPULATION:**—White, 13,152; colored, 80; American born, 13,020; foreign born, 212; total, 13,232. Farm homes owned, 1,556; rented, 536; other homes owned, 612; rented, 312; total families, 3,016.

**FINANCE:**—County tax, \$1.10 on one hundred dollars assessed valuation, which is one-fourth of the actual valuation; school tax from 15 cents to 90 cents; average, 41 cents; total assessed valuation, \$4,479,972; county debt, \$300,000; no township indebtedness.

**TIMBER:**—White oak, walnut, hickory and elm were the principal timber, which grew along the stream-adjacent portions in narrow strips. Some commercial timber of these five varieties is yet to be had almost for the asking. A few portable saw mills make rough board lumber for home consumption.

**MINERALS:**—Coal and limestone are county deposits. The former in 26-inch vein has been found, but is without development. Limestone for local, rough foundation work, is taken from the river bluffs.

SCOTLAND COUNTY'S 1902 CROP			
	ACRES	PRODUCT	VALUE
Corn	64,865	2,789,195 *	\$ 850,705
Wheat	755	14,345 *	8,605
Oats	11,615	360,095 *	90,025
Hay	47,340	71,010 †	385,455
Forage	4,900	4,770 †	23,950
Broom Corn	54	27,000 †	745
Clover Seed		15 *	100
Grass Seed		14,175 *	19,845
Tobacco	44	41,800 †	3,760
Potatoes	613	88,885 *	22,300
Vegetables	960		36,115
<b>Total</b>			<b>\$ 1,441,405</b>
LIVE STOCK AND PRODUCTS			
KIND	NUMBER	VALUE	
Cattle	34,115	\$ 1,108,735	
Horses	11,039	735,935	
Mules	1,440	108,000	
Asses and Jennets	109	10,900	
Sheep	14,724	44,170	
Swine	38,092	380,920	
Chickens	128,066		
Turkeys	43,660	113,635	
Geese	3,292		
Ducks	1,793		
Swarms of Bees	2,112	5,055	
Honey	70,400 †	8,000	
Wool	60,180 †	10,015	
Milk	1,88,960 \$	98,190	
Butter	327,662 †		
Eggs	629,800 †	78,725	
<b>Total</b>		<b>\$ 2,702,18</b>	
* Bushels.	† Pounds.	Dozen.	
† Tons.	\$ Gallons.		

Photos in heading: Aberdeen-Angus Cattle; Pure Scotch Collie Dogs, W. E. Cone, Memphis; Corn Gathering.

## CHARACTER AND PRICE OF LAND:—

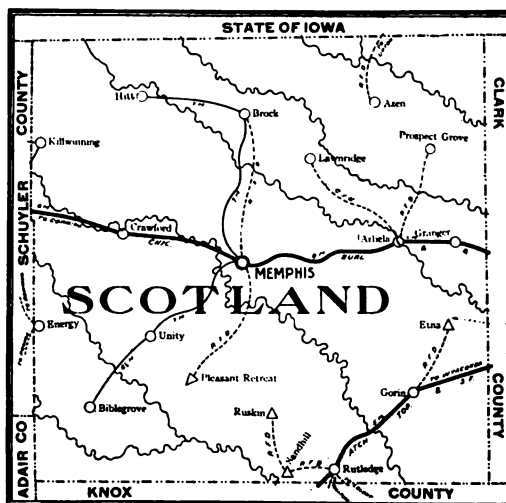
The soil map of Missouri shows that Scotland county soil and surface is of the kind general in the northeast quarter of Missouri. It is generally undulating in lay and the soil is the mulatto colored, vegetable loam of from two and one-half to four feet deep over a subsoil of clay. Along the creeks there is some deviation from the general topography. Two branches of the Fabius river, two branches of the Wyaconda creek, and the south branch of Fox river flow southeasterly to the Mississippi. Along these streams is bottom land, level, alluvial soil, amounting in total to one-fifth of the county. It sometimes overflows, though not to the extent of serious injury. Farms here are selling at an average price of \$40 an acre. One-twenty-fifth of the county is precipitous and grows white oak of a scrubby size. Here land brings \$20 to \$25 an acre. The more than three-fourths of the county is high prairie, bringing \$42.50 an acre. Prices in the prairie are remarkably uniform. Improvements are high class, as characteristic of cattle raising sections. Creeks mentioned furnish stock water to more than one-half of the stock farms; wells supply the balance. Farmers are within the last few years devoting considerable time to dairying in a small way. Four large markets are within few hours' run of local shipping points.

**MANUFACTURES:**—Axe handles, flour, wagons, brick, tile, and cucumber pickles are manufactured. Material is wholly of local production. Hickory is perhaps the most numerous timber growing upon the streams. Farmers have cucumbers to sell, and the brick and tiling are made from the clay which underlies the rich, black surface dirt. The wagon factories sell the product over a large territory, embracing northeast Missouri, southeast Iowa, and western central Illinois. There are pickle tanks in the county, with capacity for a thousand bushels of cucumbers.

**SCHOOLS:**—Good schools are within reach of every farm home, and the towns have school systems of merit. Memphis public school system is crowned with a high school doing work approved by the State University.

**TOWNS:**—Memphis, county seat, population 2,195, is supported by farming and stock raising. Stock sales are held here, and the town is the leading trading point in the county. Rutledge, population 292; Arbela, 169; Granger and Gorin, 87, are live centers of their respective farming districts.

**NEWSPAPERS:**—Memphis: Scotland County Democrat, Reveille, Chronicle; Gorin: Argus, Missouri State News; Rutledge Record; Arbela Rural Route News; Granger Gazette.





# SCOTT



**F**OUR million, nine hundred and thirty-five thousand watermelons and twenty thousand baskets of cantaloupes were grown in Scott county last year. Scott is situated upon the Mississippi river, fifth county south of St. Louis, and holds the State record for melons. Eight to ten thousand acres in the southeastern corner of the county are devoted to melon growing. Yield per acre reaches six hundred melons—half a car load. One hundred and twenty-five thousand and ninety-four acres of the county's 277,760 acres are in a state of cultivation. There are 1,341 farms, averaging 135.6 acres each of land of different descriptions. Estimated actual valuation of farms, 4,517,063. Topographically, Scott county is both level and uneven, former character embracing lowlands in all places excepting in the northeast corner. Wheat is the largest cereal export and corn is second.

SCOTT COUNTY'S 1902 CROP			
	ACRES	PRODUCT	VALUE
Corn	85,461	921,986 *	\$ 345,745
Wheat	511,190	819,040 *	483,235
Oats	384	8,450 *	2,815
Hay	4,933	7,400 †	96,200
Forage	2,303	2,890 †	13,450
Clover Seed		655 *	3,605
Tobacco	8	5,680 †	570
Potatoes	324	25,920 *	12,440
Vegetables	4,437		95,140
Total			\$ 1,063,200
LIVE STOCK AND PRODUCTS			
KIND	NUMBER	VALUE	
Cattle	10,616	\$ 266,150	
Horses	2,916	174,960	
Mules	3,415	221,975	
Asses and Jennets	11	990	
Sheep	671	2,013	
Swine	23,533	235,330	
Chickens	61,949	37,870	
Turkeys	2,392		
Geese	2,613		
Ducks	4,069		
Swarms of Bees	1,600	2,518	
Honey	53,333 †	6,667	
Wool	3,630	605	
Milk	785,561 †	66,350	
Butter	134,745 †	32,885	
Eggs	263,060 †		
Total		\$ 1,048,343	
* Bushels.	† Pounds	Dozen.	
— † Tons.	\$ Gallons.		

**POPULATION:**—White, 12,587; colored, 505; American born, 12,765; foreign born, 327; total, 13,092. Farm homes owned, 606; rented, 745; other homes owned, 442; rented, 790; total families, 2,583.

**FINANCE:**—County tax, 40 cents on one hundred dollars; road tax, 15 cents; school tax, 10 cents to \$1.30; average, 54 cents; total assessed valuation, \$4,274,120; farm lands assessed on one-fourth; town property on one-third basis; no county nor township debt. Land in three drainage districts is under a total indebtedness of \$180,571.88, each farm bound for its proportionate part.

**TIMBER:**—Indigenous species are gumwood, white oak, black oak, elm, maple, cypress, cottonwood, poplar. Cypress has been mostly removed. Gumwood, now of most commercial value, exists in southern and western portions and originally amounted to 30 per cent of lowland timber. Acres timbered, total, 152,666.

**MINERALS:**—Iron, limestone, sandstone, pottery, brick and paint clays. Kaolin is found on west side of hills, near Oran. Yellow ochre also occurs here.

**LAND:**—Soils are of these classes: Gravelly clay loam, in hills; alluvial, along streams; lowlands, rich in vegetable matter, but water-soaked, and sandy

*Photos in heading: Loading Watermelons, Bringing to Railway Car at Blodgett, and Stacked in Car.*

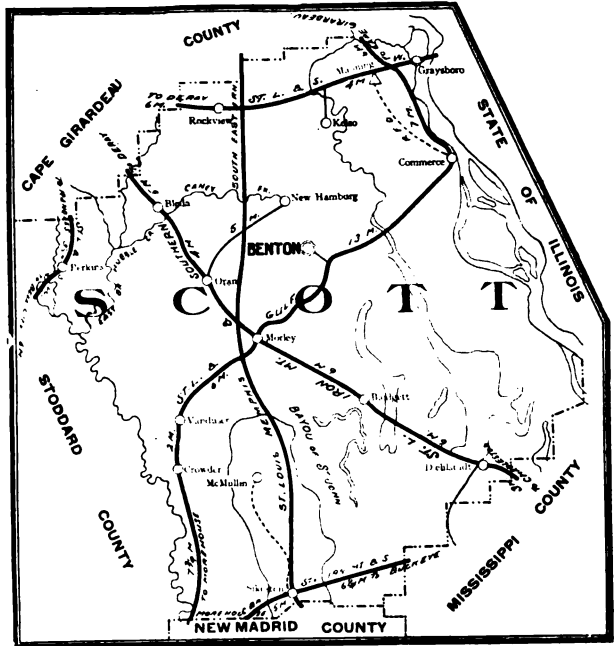
textured. Line drawn through Commerce, Morley, Oran, Rockview, Kelso, and Gray's Point, back to point of beginning, circumscribes the first, adapted to fruit growing and general farming. Unimproved lands sell at \$5 to \$15; improved, at \$30 average. Improved bottoms, \$40 to \$60; unimproved, \$10 to \$30. In southern, southwestern and western Scott county, land is generally level. One-fourth in southwest corner is lowland, four-fifths drained and in grain service. One-fifth undrained is confined to extreme west side. Between the railroads, in southern extreme, is triangular shaped region, one angle at Oran and other two on county line in south, that consists of a fertile black loam. In southwest corner of this area is located Sikeston ridge, where soil is unsurpassed. East of black soil region is sandy land, excelling in melon production. Between this and Mississippi river are several hundred acres of best bottom soil, land selling at \$40 to \$60 an acre. Last of lowlands have recently been secured from government and drainage begun.

**TRANSPORTATION:**—Railroads: St. Louis, Iron Mountain & Southern, Belmont Branch and Cairo Branch; St. Louis, Memphis & Southwestern; St. Louis & Gulf; Cotton Belt. Mississippi river is highway for heavy freight traffic.

**FISH AND GAME:**—All Mississippi river varieties of fish are plentiful and small game abounds. An occasional deer is killed. Duck shooting is chief sport for hunters.

**NEWSPAPERS:**—Sikeston Democrat, Herald; Benton Record, Kicker.

**TOWNS:**—Sikeston, population, 1,077, railroad junction, center of farming, flouring mill, cooperage works. Commerce, population, 588, on Mississippi river, being thus a river freight point, flouring mill and cooperage; Oran, railroad junction, shipping point and business center; Morley, 437 people, railroad junction, third in watermelon shipping importance; Benton, inland county seat; Blodgett, 209, chief watermelon shipping point, large lumber interests; Diehlstadt, New Hamburg. Vanduser, Gray's Point, Kelso; all trading centers.



BOWMAN-MATTHEWS  
MILLING CO.,  
SIKESTON.



**T**HE leading commercial feature of Shannon county is timber. It is in the second tier of counties north of Arkansas and the fifth west of the Mississippi river. The area is 960 square miles, 614,400 acres, upon which originally grew an unbroken forest of white, black, post and scrub oak; pine, hickory, elm, maple, ash, sycamore, hackberry, cottonwood and walnut. Yellow pine and the oaks predominated and yet are found in intermingled strips throughout the county. Yellow pine has yielded wealth to large lumber concerns at Winona and Birch Tree. Oaks are disappearing rapidly owing to railroad tie manufacture, wherein farmers employ winter months.

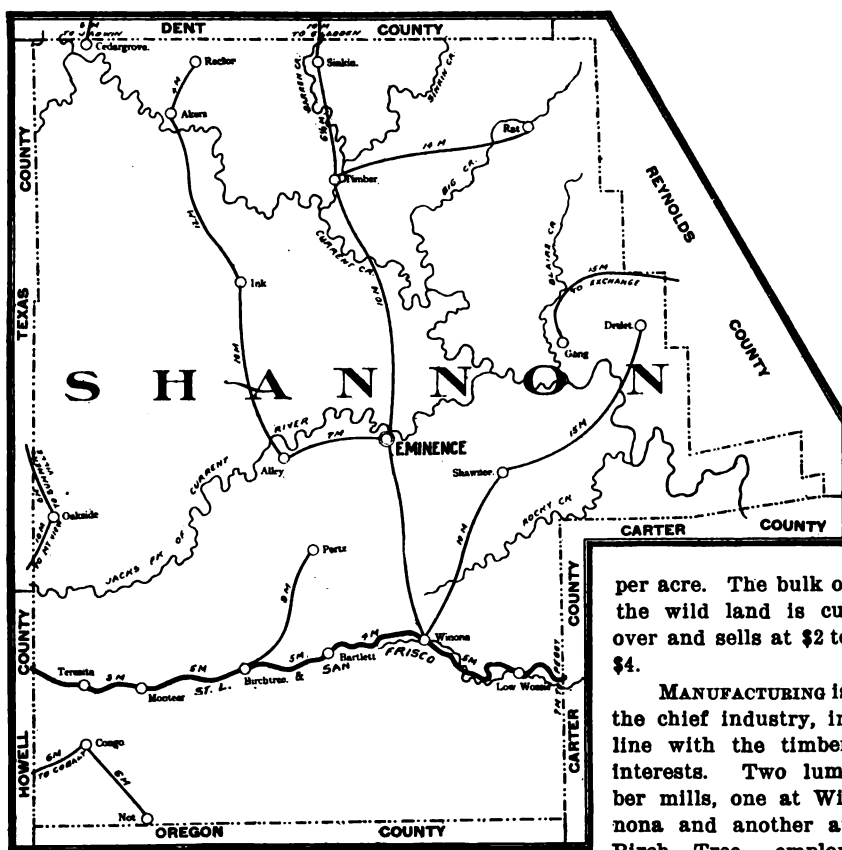
As the timber disappears, farming, stock raising and mining take its place. More than a thousand cars of iron were exported in 1903. Carbonate of zinc, zinc, silver and traces of gold are found upon or near the surface. Copper ore yielding eighty-five per cent copper and \$6 a ton gold has been found at the Casey Copper Mine, two miles north of Eminence. Lead ore almost pure is found. Capital is awaited for the development of these mineral indications.

**POPULATION:**—White, 11,241; colored, 6; American born, 11,131; foreign born, 116; total, 11,247. Farm homes owned, 961; rented, 393; town homes owned, 341; rented, 474; total families, 2,169.

**LAND:**—Shannon county is mountainous. Of its 960 square miles, 50,665 acres are included in the 1,311 improved farms. These farms average 120.5 acres, of an actual value of \$2,705,636, in total. In live stock importance, hogs lead, because of free range and minimum amount of attention required. Fat hogs are generally marketed without corn. Cattle come next, and then horses. One-tenth of the county is in actual cultivation. Of this, three-fourths is valley and bottom land bordering streams, though more extensively along the railroad and in the northeast one-fourth of the county. The remaining one-fourth is ridge land, lying chiefly between Eminence and Ink, and in the southwestern part of the county. One-half of the farms are to be had at \$10 per acre and the balance at less than \$25. The nine-tenths wild land may be classified into pine lands and cut-over lands. The former are mainly held by saw mill companies who refuse to sell. Small tracts, however, are sometimes to be had at \$3 to \$5

SHANNON COUNTY'S 1902 CROP			
	ACRES	PRODUCT	VALUE
Corn	21,680	542,000 *	\$208,250
Wheat	4,035	44,385 *	26,185
Oats	913	18,260 *	6,085
Hay	4,791	7,185 †	61,075
Forage	535	625 †	3,125
Clover Seed		15 *	85
Grass Seed		10 *	20
Tobacco	22	15,620 †	1,560
Potatoes	273	20,475 *	9,890
Vegetables	350		21,100
Total			\$392,315
LIVE STOCK AND PRODUCTS			
KIND	NUMBER	VALUE	
Cattle	8,811	\$ 198,247	
Horses	2,429	145,740	
Mules	1,081	64,860	
Asses and Jennets	24	2,160	
Sheep	2,391	7,173	
Swine	18,210	182,100	
Chickens	39,067		
Turkeys	891	22,540	
Geese	1,195		
Ducks	2,319		
Swarms of Bees	327	915	
Honey	10,900 †	1,363	
Wool	7,140 †	1,190	
Milk	864,730 †	74,925	
Butter	151,122 †		
Eggs	209,930	26,240	
Total		\$727,458	
* Bushels.	† Pounds.	Dozen.	
† Tons.	‡ Gallons.		

Photo in heading: Log Train and Saw Mill, Ozark Land & Lumber Co., Winona.



per acre. The bulk of the wild land is cut over and sells at \$2 to \$4.

**MANUFACTURING** is the chief industry, in line with the timber interests. Two lumber mills, one at Winona and another at Birch Tree, employ

750 men. The mill of the Ozark Land & Lumber Company at Winona, draws from the pine lands of Shannon, Carter and Oregon counties, where the company owns 45,000 acres of untouched timber, besides 100,000 acres of cut over land ready for homestead. The mill includes: saw mill, planing mill, loading shed, refuse burner; and the lumber stock covers 30 acres. The sawing capacity is 140,000 feet daily and the planing capacity 150,000 feet. The company operates 40 miles of standard gauge road, 45 miles of telephone system, and an electric light plant of 600 sixteen-candle power lights and arc lights.

The Cord-Fisher Lumber Company, at Birch Tree, owns 10,000 acres of yellow pine forest and 60,000 acres cut over. The mill capacity is 130,000 and the planer 85,000 feet daily. It can put out 22,000 laths per day and has a dry kiln capacity of 30,000 feet. The mill operates 26 miles of telephone.

Railroad tie industry is large. Most ties are rafted down Current river to Chicopee, in Carter county, where they are put on the railroad.

There are several grist mills in Shannon, and flouring mills are located at Alley, Cedargrove and Birch Tree.

The Frisco railway from Springfield to Cape Girardeau crosses the south end of the county and has 27.30 miles of track therein.

Water is largely furnished by springs, which in the main supply the clear, swift-running streams. Current river is the largest stream. It abounds in trout, bass, jacksalmon, crapple, mountain trout, redhorse, suckers and fish of other less plentiful varieties. Current river scenery is famous.

**TOWNS:**—Principal towns are, Winona, Birch Tree and Eminence, the first two being railroad towns and the latter the inland county seat.

**FINANCE:**—County tax, 50 cents; school tax, average 55 cents; total assessed valuation, \$2,213,438; two-thirds actual valuation. No debts.

**NEWSPAPERS:**—Eminence Current Wave, Journal; Winona Democrat; Birch Tree Record.





**S**HELBY is situated in northeast Missouri. Its eastern border is thirty miles west of Hannibal; its southern line seventy-five miles north of the Missouri river; its northern boundary forty-five miles south of Iowa. General farming and live stock raising are the chief pursuits. In timothy seed production the county excels. Corn, horses and mules, pure bred and beef cattle aggregate in value more than a million dollars each. A feature in the cattle industry of Shelby is that of pure bred sales, one of Hereford and one of Shorthorn each year. Footings therefor run from twenty to thirty thousand dollars annually. Sheep are raised. At Shelbyna is held an annual fair which gives stimulus to live stock breeding and agriculture. The chief social event of the year is the Old Settlers' Reunion at Shelbyville, county seat. There are 514 square miles of land surface, equal to 328,960 acres, of which 245,638 acres are subject to plow. Farms average in size 124.2 acres each, to the number of 2,475, of an estimated actual worth \$6,993,148.

POPULATION:—White, 15,488; colored, 679; American born, 15,829; foreign born, 338; total, 16,167; farm homes owned, 1,790; rented, 639; other homes owned, 707; rented, 511; total families, 3,647.

FINANCE:—County tax, 40 cents; road tax, 20 cents; school tax from 10 cents to \$1.00, average 38 cents; total assessed valuation, \$5,826,014; assessed valuation of real valuation forty per cent. No county debt; no township debt.

TIMBER:—Originally five-twelfths timbered with oak, elm, walnut, ash, sycamore, cherry, hackberry and birch. Two-thirds removed. Large trees stand for shade in midst of blue grass pastures. Railroad ties and pile stuff are shipped from Shelbyna, Clarence, Hunnewell, Lakenan and Lentner.

LIMESTONE AND COAL:—Limestone of commercial quality is found upon Salt river. It is used only locally. Coal is found at a point five miles east of Shelbyville. Mining methods are crude. The mineral is worked by farmers who haul it by wagon to town.

LAND:—Shelby county embraces level prairie, long-rolling hills and, along the creeks, bluff land. The prairie lies largely in the south and west, is the highest priced and attains the price summit adjacent Clarence and Shelbyna, the leading railroad towns. Hill lands obtain throughout the county, alternating with

SHELBY COUNTY'S 1902 CROP			
	ACRES	PRODUCT	VALUE
Corn	80,440	2,458,835 *	\$ 1,054,945
Wheat	14,680	371,830 *	224,600
Oats	6,085	231,305 *	57,825
Hay	43,750	65,620 †	328,100
Forage	10,115	11,800 †	50,000
Flax	20	110 *	145
Broom Corn	11	5,500 †	150
Clover Seed		40 *	265
Grass Seed		27,250 †	38,150
Tobacco	38	36,100 †	3,250
Potatoes	574	86,100 *	21,523
Vegetables	760		33,150
Total			\$ 1,821.1
LIVE STOCK AND PRODUCTS			
KIND	NUMBER	VALUE	
Cattle	29,051	\$ 944,155	
Horses	11,370	758,000	
Mules	3,388	254,100	
Asses and Jennets	114	11,400	
Sheep	23,837	71,405	
Swine	39,905	309,050	
Chickens	139,910		
Turkeys	3,723	145,910	
Geese	4,286		
Ducks	1,959		
Swarms of Bees	2,867	6,325	
Honey	95,567	11,948	
Wool	89,450 †	14,910	
Milk	1,988,674 \$	135,360	
Butter	355,803 †		
Eggs	1,032,620 †	131,575	
Total		\$ 2,884,126	
* Bushels	† Pounds.	Dozen.	
† Tons.	\$ Gallons.		

Photo in heading: Shelby County Farm Scene.

prairie strips, and growing more distinct toward the northeast corner, where is the remaining timber. Bluffs are mostly along ravines in northeast Shelby county. Prairie farm lands along the Burlington railroad range in price from \$35 an acre, to \$75 in the vicinities of Clarence and Shelbyville. Two-thirds of the prairie may be bought at \$50. Away from the railroad same character of land brings \$30 to \$50. One-fourth may be had at \$35 and less. Land originally timbered sells at \$25 to \$60. One-half hill land is available at \$35. Bottom lands, which are generally less well improved, sell at \$25 to \$45 an acre. In the northeast corner of Shelby county perhaps one thousand acres of rough land may be bought at \$15. Hill land soil is adapted to bluegrass, timothy, clover, wheat and oats. In color it is brown and in texture porous. Prairie soil is black loam. Largest farm in the county is two thousand acres.

Flour, cornmeal, wagons and cigars are manufactured. Flouring mill of 100 barrel capacity is located at Shelbyville; one is at Clarence and one at Bethel. "New Century" and "Morgan" wagons are made at Shelbyville.

**RAILROADS:**—Burlington, Kansas City to St. Louis, Hannibal and Chicago; 30 miles roadbed crossing county east to west.

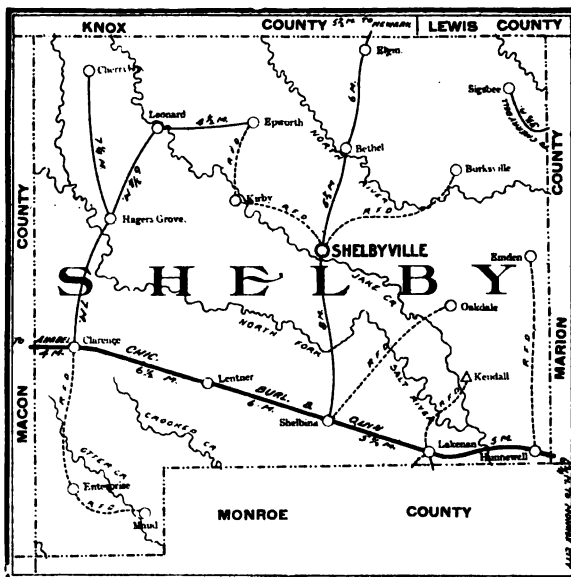
**CHURCHES:**—At least one church within three miles of any given point. Represent all Protestant denominations.

High Schools at Shelbyville, Shelbyville and Clarence are among first rank high schools of Missouri.

**FISH:**—Bass, channel and mud cat and crapple are caught. The record is sixteen two-pound fish in one hour.

**TOWNS:**—Shelbina, Clarence and Shelbyville are vigorous, farming communities with modern improvements; electric lights, telephone exchanges, macadamized streets, public parks. First two have additional advantage of shipping points. Last named is county seat. There are no saloons in the county. Jury trials average less than half dozen a year. Court holds about eight days a year. Hunnewell, Bethel, Lakenan and Lentner, farming towns.

**NEWSPAPERS:**—Shelbina Torchlight, Democrat; Shelbyville Herald, Guard; Clarence Courier, Farmer's Favorite; Hunnewell Graphic.





**T**IMBER and agriculture are the reliance of Stoddard county. Originally the land, of two distinct types, was covered with a timber growth representing eighty-three different varieties. In natural sequence, as the former is converted into shingles, handles, hubs, lumber, spokes, cooperage and other products of local mills, agriculture is extended. County is one hundred and ten miles south of St. Louis and twenty miles west of the Mississippi river. It embraces 840 square miles of land, 537,600 acres, including both hill and the southeast Missouri lowlands. Improved farms include 142,759 acres, less than one-third. Farms number 2,873, average acreage of which is 79.2 acres, of a total actual valuation of \$5,342,340.

STODDARD COUNTY'S 1902 CROP			
	ACRES	PRODUCT	VALUE
Corn	59,042	1,712,218 *	\$ 642,060
Wheat	28,884	482,540 *	284,690
Oats	3,030	84,840 *	28,280
Hay	7,551	11,325 †	113,250
Forage	500	585 †	2,925
Broom Corn	20	10,000 †	275
Clover Seed		15 *	85
Grass Seed		110 *	210
Cotton	5,850	2,183,750 †	163,780
Tobacco	57	40,470 †	4,045
Potatoes	440	39,600 †	19,010
Vegetables	760		39,150
Total			\$ 1,391,810
LIVE STOCK AND PRODUCTS			
KIND	NUMBER	VALUE	
Cattle	15,762	\$ 398,800	
Horses	6,428	385,680	
Mules	3,110	217,700	
Asses and Jennets	37	3,330	
Sheep	2,405	7,221	
Swine	39,708	397,060	
Chickens	109,380		
Turkeys	2,304		
Geese	8,132	65,605	
Ducks	7,524		
Swarms of Bees	2,934	6,443	
Honey	97,800 †	12,325	
Wool	9,510 †	1,585	
Milk	1,735,035 †	133,215	
Butter	329,348 †		
Eggs	509,480	63,885	
Total		\$ 1,687,573	
* Bushels.	† Pounds.	Dozen.	
† Tons.	§ Gallons.		

POPULATION:—White, 24,622; colored, 148; American born, 24,521; foreign born, 148; total, 24,770. Farm homes owned, 1,819; rented, 1,288; other homes owned, 687; rented, 1,170; total families, 4,964.

FINANCE:—County tax, 50 cents on one hundred dollars; school tax from 10 cents to \$1.35, average 53 cents; total assessed valuation, \$5,065,230 assessed valuation fifty per cent of real value; no county debt; no township debt.

LAND:—Middle part of county north to south is Crowley's Ridge, which swings, with occasional breaks, in a broad curve from Cape Girardeau, Missouri to Helena, Arkansas. In Stoddard, upon the east edge it presents a cliff, averaging 100 feet high. Cotton Belt railroad marks this cliff. On the west, the ridge gradually seeks level with lowlands. Ridge land represents one-half of the county. Soil is yellow-red clay, some sand, and overlays gravelly clay, very tenacious. Top soil is one to four feet in depth. In this half, the representative farm is 100 acres with sixty acres under cultivation, farms worth \$20 an acre. Adjoining towns of Bloomfield and Dexter it reaches \$50. Fifteen per cent of hills, timbered, sells at \$10. East of and adjoining Crowley's Ridge is lowland, only ten per cent improved. Away from town this sells at \$15 to

Photos in heading: Wheat and Corn at Bloomfield and Cutting Oats at Dudley.

\$20; near Essex, Dexter Gray's Ridge, Frisco, Bernie, Idalla, Bell City, Ardeola and Zeta \$20 to \$30 with an occasional \$40 farm. Remaining ninety per cent is wild land selling at \$6 to \$10.

To this \$5 an acre may be added for drainage. Nearly \$200,000 has been spent in draining. United States government, Missouri State government and Stoddard county co-operate in drainage. Some farmers shallow ditch, three feet, to good result. Public drainage ditches number three: one ditch south from Bernie; second in same direction on a line with Dexter and third south from Essex. Soil is mulatto alluvial, adapted to wheat, cotton, corn hay and vegetables. Places are strongly sand and here are grown melons. Twenty thousand acres of this in north belongs to a land and lumber company. Nearly all originally overflowed. One-sixth portion remaining is about same type lying west of Crowley's Ridge. North one-third is cleared and in fairly well improved farms, worth

\$20 to \$25; near Puxico a few farms sell at \$40; south two-thirds improved sells at \$15 to \$20; wild land, \$10. All overflows. Titles are warranted.

**TIMBER:**—Twenty-one kinds of oak; walnut, hickory, red, black and white gum, poplar. Forty per cent land is cleared. Saw mills 20,000 to 35,000 feet daily capacity, located at Bloomfield, Dexter, Essex, Dudley and Zeta.

Clay for brick, tile and earthenware manufacturing is plentiful; likewise gravel in hills. Limestone in hills.

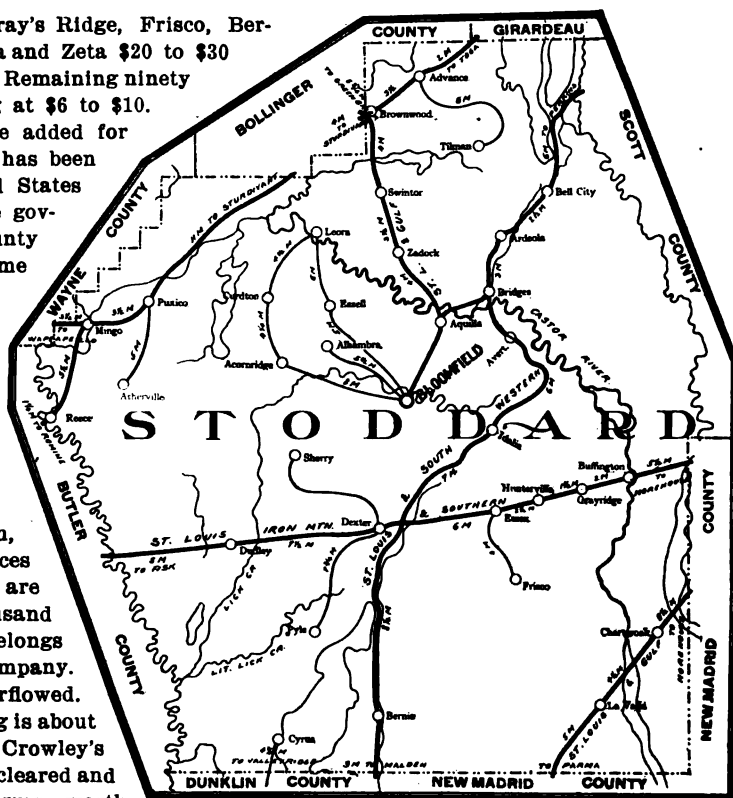
**MANUFACTURES:**—Timber products are first. Flour, whiskey, earthenware. Cotton is ginned. Flour mills are up to 300 barrels daily capacity.

**TRANSPORTATION:**—Three railroads into St. Louis; Iron Mountain, Cairo, Arkansas & Texas, 28.05; Cotton Belt, 37.46; Frisco (St. Louis & Memphis), 25.80; (St. Louis & Gulf), 27.71 miles taxed roadbed. New road is being built through Bloomfield from Van Duser, Scott county, to Campbell, Dunklin county. Levee roads: west from Bloomfield toward Greenville, ten miles; part of old line from Cape Girardeau to Poplar Bluff lies across northwest corner; Old New Madrid levee road crosses southeast bottoms from Bloomfield.

**SCHOOLS:**—High schools at Dexter and Bloomfield approved. Buildings contain 12 and 7 rooms respectively and are among best in Missouri. Christian College at Dexter, preparatory school.

**TOWNS:**—Dexter, supported by wood work factories and farming; cotton gin, heading and stave factory, hub and spoke factory, coiled elm hoop factory, two axe handle factories, machine shop, brick yard, ships seven hundred car loads timber products annually. Bloomfield, county seat, farming and earthenware factory. Puxico, farming; Advance, Bell City, Bernie, Dudley and Essex.

**NEWSPAPERS:**—Dexter Messenger, Stoddard County Democrat; Bloomfield Vindicator, Courier; Puxico Index; Advance Guard.





# STONE



**N**ATURAL resources of Stone county include timber, both hardwood and yellow pine, minerals, mineral waters from numerous springs, picturesque scenery and fruit and live stock pasture lands. Stone is three counties east of Indian Territory and borders Arkansas on the south. Land is mountainous, especially so in the southern part and adjacent to White river and its principal tributary, James Fork. Along these streams are caves known to embrace large acreages. They are usually filled with stalactitic and stalagmitic formations of matter resembling onyx. Area of the county is 516 square miles, 330,240 acres, of which 257,113 acres are timbered. Pine timber is estimated at three per cent, worth approximately fifty thousand dollars. The various oaks are chief, aggregating a value several times that of the pine and largely augmented by the recent construction of the Missouri Pacific main line railroad from Kansas City to Memphis which runs across Stone county from northwest to southeast. Sulphur springs include the famous Ponce de Leon spring where many parties camp in the warm summer months. Well known Marble Cave, sixteen miles southeast of Galena is a won-

derfully attractive cavern in which scientists have taken much interest because of its onyx deposits. Agriculture is confined to the valleys of White river and tributary creeks. Seventy-three thousand, one hundred and twenty-seven acres are in cultivation. The farms number 1,627, averaging 104.8 acres each of tillable, pasture and timber lands. Estimated worth \$1,174,170. Government land subject to homestead at \$1.25 an acre, 13,044 acres.

**POPULATION:**—White, 9,888; colored, 4; American born, 9,847; foreign born, 45; total, 9,892. Farm homes owned, 1,282; rented, 376; other homes owned, 165; rented, 168; total families, 1,991.

**FINANCE:**—County tax, 65 cents on one hundred dollars valuation; school tax, 40 cents to \$1.00, average, 65 cents; assessed valuation per cent of real valuation, 50 cents; assessed valuation, \$1,432,310; county debt, \$22,500; no township debt.

**TIMBER:**—Railroad ties and cedar posts have for many years been wagon hauled and floated to market, and recent railroad has lent impetus to the industry. The entire county is timbered except in extreme north end and along the stream bottom lands, where lie the farms. Estimated that white oak represents twenty-seven per cent; black oak, twenty per cent; black-jack, twelve per cent; post oak, ten per cent; pine, hickory,

STONE COUNTY'S 1902 CROP			
	ACRES	PRODUCT	VALUE
Corn	29,606	888,180 *	\$ 279,775
Wheat	12,776	191,840 *	105,400
Oats	1,834	5,120 *	14,580
Hay	7,315	9,145 †	64,015
Forage	210	280 †	1,400
Broom Corn	13	7,150 †	195
Clover Seed		620 *	3,470
Cotton	80	8,400 †	570
Tobacco	60	39,000 †	3,900
Potatoes	217	21,700 *	7,595
Vegetables	420		15,215
Total			\$496,115
LIVE STOCK AND PRODUCTS			
KIND	NUMBER		VALUE
Cattle	10,939		\$ 273,475
Horses	3,914		24,840
Mules	1,183		70,980
Asses and Jennets	54		4,860
Sheep	4,456		13,370
Swine	18,736		187,360
Chickens	64,512 †		
Turkeys	2,183 †		
Geese	2,372 †		39,740
Ducks	1,643 †		
Swarms of Bees	505		1,272
Honey	16,833 †		2,104
Wool	14,215 †		2,369
Milk	1,080,536 \$		70,725
Butter	197,087 †		
Eggs	402,330 †		50,290
Total			\$961,385
* Bushels.	† Pounds.	Dozen.	
† Tons.	\$ Gallons.		

Photo in heading: A Stone County Hillside.

walnut, sycamore, maple, elm, ash and linden the balance.

**MINERALS:**—Marble, onyx, lead, zinc, tripoli, iron, clays. Lead is found all over county, but not as yet in paying quantities. Most favorable indications found are ten miles east of Galena. Marble and onyx are found in caves along river sides. Limestone is abundant. No mineral development of consequence.

**LAND:**—Northern one-third is rough as a whole, but contains many gentle slopes and table lands and valleys. In a general way the southern portion is very broken, the most mountainous being along the rivers. Along White and James rivers are valleys of alluvial soil, fertile enough to grow best of grain crops. Hill sides are generally too rough for cultivation but are clothed in a blue stem grass. In extreme southwestern corner and also a section northwest of Galena land is suitable for general farming purposes. Soil the county over, excepting bottoms, is limestone with a heavy admixture of flint fragments and a red limestone subsoil also containing flint gravel. Improved bottom lands are bringing \$15 to \$25 an acre; unimproved \$8 to \$12. Uplands may be had for \$5 to \$10 where under improvement and \$1.25 to \$7.50 unimproved, depending mostly upon individual size and quantity of timber.

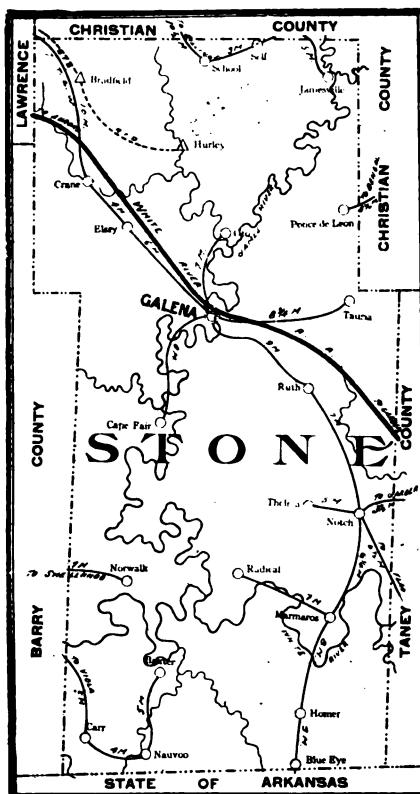
**MANUFACTORIES:**—County boasts flouring mills run by water, canning factories, broom factories, distilleries and saw mills.

**TRANSPORTATION:**—Missouri Pacific railroad, Kansas City to Memphis, just completed. White river is used for timber transportation.

**PONCE DE LEON SPRING:**—There are numerous springs welling from the mountain sides. Limestone and sulphur waters are found. A spring of the latter is located at Galena. The largest is at Ponce de-Leon. River scenery and mountain air, fishing and hunting and spring water attract many camping parties in summer.

**TOWNS:**—Galena, county seat; Crane, Ruth, are trading centers of respective farming districts.

**NEWSPAPERS:**—Galena News, Galena Oracle.





**S**ULLIVAN is in north Missouri. It lies fifteen miles south of Iowa, sixty-five miles west of the Mississippi river, and contains 656 square miles land area. Cattle raising and feeding, and horse breeding are main sources of revenue. Within the county are twelve pure-bred cattle herds, some of which are among the best Hereford, Shorthorn, Polled-Angus, and Red Polled herds of Missouri. There are also several horse stables, one of which handles Percheron. Last year this stable sold eleven stallions and thirty-one mares under the hammer at an average of \$514.37 per head. Regina, 28817, one of the number, brought \$2,500. Dr. Horine, 28821, yearling stallion, sold for \$1,100. There are 419,840 acres, of which 323,868 acres are improved farms. Number of farms, 3,101, average size, 129.9 acres of arable, pasture and feed-lot land. Estimated value of farm lands, \$6,382,353.

**ORIGINAL TIMBER:**—It was elm, white oak, black oak, hickory, maple, wild cherry, birch, walnut, box elder, pin oak, cottonwood, hackberry and sycamore. Eastern and western creeks grew more white oak, while abundance of elm in

central portion gave strip extending north and south across the county the name of "Elm Woods." Two-thirds timber has been removed as cordwood and railroad ties. Former is now shipped from Greencastle and Reger. Sawed posts sell at fifteen to twenty cents; ten cents for hewn posts. Milan is seat of two stationary saw mills and there is one at Reger. Portable mills are many.

**COAL:**—Thought to underlie half the county. At Milan a 42-inch vein was worked until 1895, when shaft burned; it has not been replaced. Limestone in great quantity is found upon the streams. It is used only for local foundation purposes.

**LAND:**—Topographically, Sullivan county is rolling, even broken along the streams, making the soil widely diversified. Here a rich bottom farm, adjacent thereto is one comprising hills and low-lying bluffs, and a third next adjacent of undulating prairie. Medicine, Yellow, Mussel, and Spring creeks parallel north to south and furnish abundant stock water. All lands grow grasses with native adaptability; hence Sullivan is a stock raising county. Timber lands skirt the streams; it is bottoms and bluffs. Then are the hills, one hundred and fifty feet higher than complementary valleys, rising gradually, and thirdly, high, rolling prairies, more extensive and frequent in the western one-third and in the south half of the eastern one-third. Soil is black loam, ten to twenty inches deep over clay subsoil, both in prairie and hills. One-half the prairie can be

SULLIVAN COUNTY'S 1902 CROP			
	ACRES	PRODUCT	VALUE
Corn	71,620	2,798,100 *	\$ 851,895
Wheat	741	14,820 *	8,890
Oats	2,000	68,000 *	17,000
Hay	84,610	126,920 †	631,600
Forage	9,600	112,000 †	50,000
Broom Corn	4	2,000 †	55
Clover Seed		10 †	65
Grass Seed		4,020 *	5,630
Tobacco	20	19,000 †	1,710
Potatoes	784	117,600 *	29,400
Vegetables	1,215		52,360
<b>Total</b>			<b>\$1,657,605</b>
LIVE STOCK AND PRODUCTS			
KIND	NUMBER	VALUE	
Cattle	63,107	\$2,060,975	
Horses	14,201	946,735	
Mules	1,657	124,275	
Asses and Jennets	53	5,300	
Sheep	15,835	40,005	
Swine	29,835	298,350	
Chickens	169,395		
Turkeys	9,011	171,130	
Geese	5,225		
Ducks	3,160		
Swarms of Bees	3,147	8,355	
Honey	101,900 †	18,115	
Wool	59,825 †	9,970	
Milk	2,937,894 †	152,280	
Butter	525,604 †		
Eggs	1,020,420 †	128,675	
<b>Total</b>		<b>\$3,955,165</b>	
* Bushels.	† Pounds.	Dozen.	
† Tons.	\$ Gallons.		

Photos in heading: Sullivan County Cattle.

had at \$30 to \$37.50 an acre, up to \$45 in case of high improvements. Timber land is at hand for \$12.50 an acre, averaging \$20, up to \$35, for the best. Within a mile of Milan, \$50. There are at least ten 1,000-acre farms. Fencing mostly wire.

**MANUFACTORIES:**—One wood-working plant in Milan employs twenty men, making sash, doors, door sash and other building supplies. A mill is maintained, including lumber sheds, dry kiln of 10,000 feet capacity. Flour is milled at Milan, Green City, Humphreys, Harris and Green Castle. Two brick plants are located at Milan.

**TRANSPORTATION:**—Chicago, Milwaukee & St. Paul, Kansas City to Chicago, 18.40; Quincy, Omaha & Kansas City, 33.74; Burlington & Quincy, 26.30.

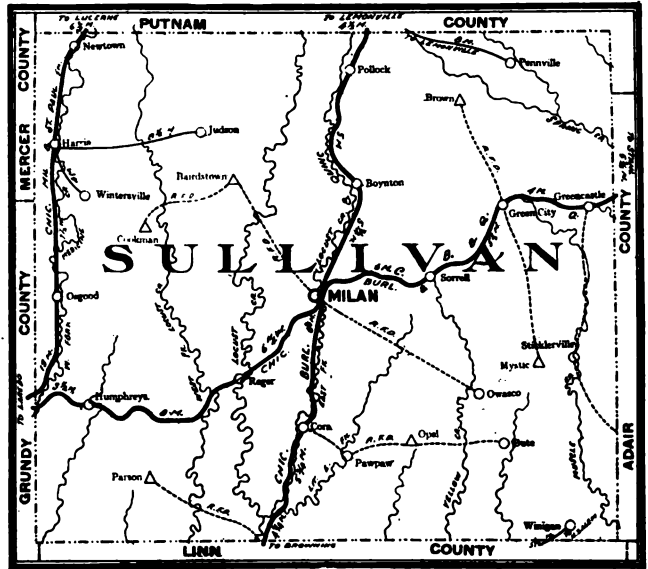
**SCHOOLS:**—Milan High School conforms to course of study laid down by University of Missouri. It is capsheaf to ten rooms graded school with modern library. Building steam heated and otherwise modern. Humphrey's College, Green City, established fifteen years, private academic institution.

**TOWNS:**—Milan, county seat, at intersection of two railroads, location of Quincy, Omaha & Kansas City railroad shops, employing 250 men. Waterworks and electric light plants, owned by city. Green City, Newtown, Harris, Green Castle, Humphreys; all live stock centers.

**POPULATION:**—White, 20,168; colored, 114; American born, 20,059; foreign born, 223; total, 20,282. Farm homes owned, 2,294; rented, 749; other homes owned, 683; rented, 517; total families, 4,243. In Milan one person in three is a member of some church.

**FINANCE:**—County tax, 75 cents; school tax, 42 cents; total assessed valuation, \$5,544,812; two-fifths real value; county debt, \$130,000; sinking fund loaned, \$70,000; no township debt.

**NEWSPAPERS:**—Milan Standard, Republican; Green City Press; Newtown Chronicle; Humphreys Tribune.



RIBBON,  
A SULLIVAN  
COUNTY  
HORSE.





**T**IMBER, minerals, wild game, fruit and picturesque ruggedness constitutes the wealth of Taney county. It has 660 square miles of mountainous land, 422,400 acres, of which 66,988 acres are included in improved farms. It has the largest game preserve in Missouri. It is rich in stone and granite. There are caves of onyx and deposits of zinc and lead and marble. Peaches, pears, grapes, apples and strawberries grow luxuriously. Farms number 1,671, found along streams and adjoining hills, averaging an acreage of 144.5, counting cultivated, pasture and timber lands. Total actual value of farm lands, \$1,520,884; total farm production four times as much each year.

**POPULATION:**—White, 10,125; colored, 2; American born, 10,030; foreign born, 97; total, 10,127. Farm homes owned, 1,372; rented, 380; other homes owned, 120; rented, 143; total families, 2,015.

**FINANCE:**—County tax, 60 cents on one hundred dollars; school tax from 40 cents to \$1.45; average, 65 cents; total assessed valuation, \$1,331,466; assessed valuation per cent of actual valuation, 55; county debt, \$7,128.60; no township debt.

**TIMBER:**—Black oak is chief, comprising thirty-five per cent of the timber which covered originally seventy-five per cent of county. White oak embraced twenty-five per cent of it, of best individual size in south half. It grew in groves, many of which have in recent years yielded to the tiemaker's axe, without, however, perceptibly diminishing supply. It is estimated that half a million dollars worth of white oak timber is available. Post oak grows on ridges and flats. Twelve per cent of timber is black-jack. These two species are useful only for fuel. Pine in primeval quantity, eight per cent, stands in southwest corner. Cedar is an important scattering growth. It occurs upon bluffs of rivers mostly in southern half. Trees attain a height of forty feet.

**MINERALS:**—Signs of zinc, lead, granite, marble, onyx and building stones. Lead prospecting has been accompanied with some success along Turkey, Bylin, Swan, Bull, Bear, Beaver, and Short creeks. Shaft on Caney creek is 100 feet deep. Lead and zinc are both taken therefrom. Marble deposit is found on Pine

TANEY COUNTY'S 1902 CROP			
	ACRES	PRODUCT	VALUE
Corn	27,381	701,115 *	\$219,210
Wheat	9,556	133,785 *	73,580
Oats	2,188	64,140 *	16,995
Hay	3,038	3,800 †	26,600
Forage	505	675 †	3,375
Flax	7	28 *	30
Broom Corn	4	2,200 †	60
Cotton	2,010	603,000 †	45,325
Tobacco	54	35,100 †	3,500
Potatoes	312	31,200 *	10,920
Vegetables	340		15,025
Total			\$144,520

LIVE STOCK AND PRODUCTS		
KIND	NUMBER	VALUE
Cattle	15,144	\$ 378,600
Horses	3,838	230,280
Mules	953	57,180
Asses and Jennets	57	5,130
Sheep	5,662	16,985
Swine	21,567	215,670
Chickens	44,941	
Turkeys	938	31,830
Geese	2,050	
Ducks	213	
Swarms of Bees	245	687
Honey	8,167 †	1,021
Wool	14,648 †	2,440
Milk	940,840 †	
Butter	150,003 †	63,110
Eggs	330,930 †	41,906
Total		\$1,044,209

\* Bushels. † Pounds. ‡ Dozen.  
† Tons. § Gallons.

Photos in heading: Taney County Views.

Mountain in south part of county; also granite, dolomite and limestone.

**LAND:**—Upland soils are limestone clay, admixed generously with gravel. Subsoil is red, gravelly clay. Surface is stony. Fruit may be grown on most all the land, and corn in the darkest places. Uplands have yielded forty bushels to the acre in corn. Clover and other grasses grow here and tomatoes do well. Best land is in the northeastern corner, along Beaver creek, and elsewhere along White river. The bald knobs and rocky glades are common in the

southeastern corner and to a less extent all over the south half. They are worthless for farming. These places are caused by surface being underlaid by solid rock. They often cover whole hills or an elevated flat. Improved river bottom farms sell at \$10 to \$25 an acre. Best improved uplands, \$10 to \$15; unimproved, \$1.25 to \$5 an acre. Government lands, 13,474 acres.

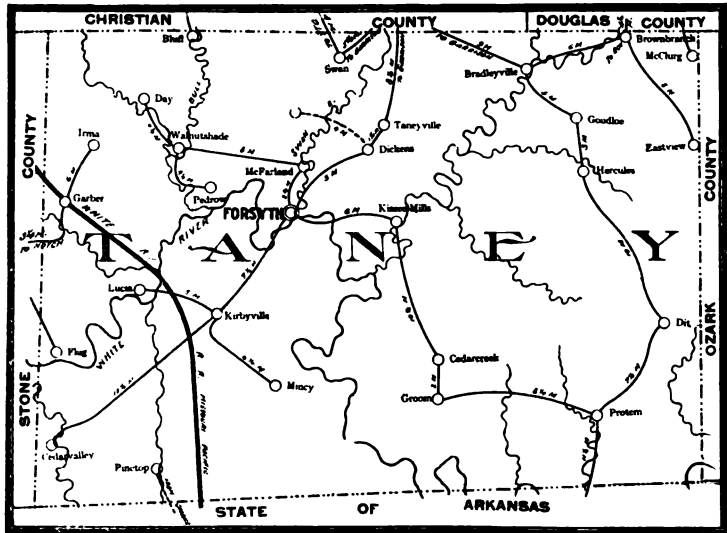
**MANUFACTORIES:**—Small saw mills, cotton gins, distillery, steam flouring mills and water mills, and corn crackers constitute the manufactories.

**TRANSPORTATION:**—White River Route, Missouri Pacific, Carthage to Memphis, has recently been built through the southwest corner of Taney county, giving it railroad outlet. White river is used extensively for rafting timbers to market.

**WATER:**—White river winds through county for one hundred miles. It is clear, cool, contain stream and affords fishing unsurpassed. Striped and black bass, goggle-eye, jacksalmon, catfish and buffalo are caught. Sulphur springs are frequent, though wholly unimproved, through the county. Some of these are near Forsyth, where many parties camp in summer, bathing and hunting. Deer, wild turkeys, squirrels and other small game are killed.

**TOWNS:**—Forsyth, county seat, situated upon White river, in center of a valley farming district; population 204. Cedar Valley, center of farming, location of water flouring mill and cotton gin. Lucia, in western part, is on new railroad. Pine Gap, west of Forsyth, is a lumberman's camp. Kirbyville has cotton gin, Walnut Shade, Day, Stow and Bluff are trading points.

**NEWSPAPER:**—Forsyth Republican.





**L**ARGEST county in Missouri is Texas, with its 1,145 square miles of surface. It is in the heart of the Ozark mountains, second county north of Arkansas, six counties east of Kansas State line. All the products of general farming are counted among its products. Six hundred thousand bushels of corn are produced; cattle, horses and hogs following in importance. Unique among its leading industries, however, is that of growing ginseng, used by Chinese as a great cure-all. Isolated gardens about the county total seven acres in plant. It grows beneath sheds covered with branches of young trees. Roots sell at \$8 a pound. Of the 732,800 acres of land in Texas county, 185,681 are in cultivation. Farms number 3,729, of an average size of 135.5 acres, estimated at \$3,953,426 in actual valuation.

**POPULATION:**—White, 22,187; colored, 5; American born, 21,849; foreign born, 343; total, 22,192. Farm homes owned, 2,990; rented, 756; other homes owned, 317; rented, 260; total families, 4,323.

**FINANCE:**—County tax, 50 cents on one hundred dollars valuation; school tax average, 60 cents; total assessed valuation, \$3,359,235; assessed valuation per cent of actual valuation, 66 2-3; no county or township debt.

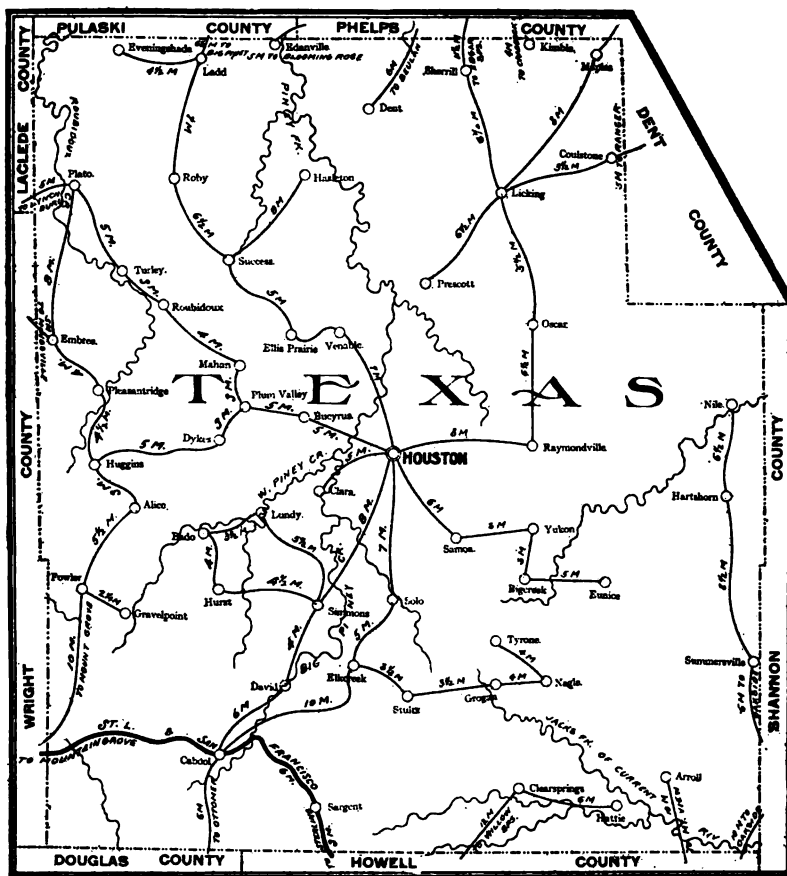
**TIMBER:**—Over one-half a million acres yet in timber. Of this, black-jack comprises thirty-five per cent; black oak, twenty-five per cent; white oak, twenty per cent; balance mainly pine. The last formerly was scattered throughout the county, but became predominant only in Jackson and Current townships, bordering the southwest corner of Dent county. It is valued at \$5 to \$7.50 an acre, making a total resource of approximately \$100,000, rapidly being converted into money. Mills are portable.

**MINERAL:**—No developed mines. Indications of lead and zinc are found in eastern and southern parts; iron in north central; copper in extreme west. Iron is especially promising. Building stones and clays are abundant. Chalk is found.

**LAND:**—Adjacent to principal streams, Piney river and tributaries, Current river, Roubidoux river and Jack's Fork, county is much broken and most of hills are very stony, but there are large areas which are in the nature of upland valleys and undulating plateaus. These are almost free from stones and may be farmed

TEXAS COUNTY'S 1902 CROP			
	ACRES	PRODUCT	VALUE
Corn	54,362	1,630,860 *	\$ 611,570
Wheat	24,800	324,800 *	197,530
Oats	4,851	91,320 *	30,405
Hay	22,974	34,460 †	223,990
Forage	2,220	2,590 †	12,950
Broom Corn	10	5,000 †	135
Clover Seed		15 *	85
Grass Seed		20 *	45
Cotton	60	18,000 †	1,350
Tobacco	58	41,180 †	4,120
Potatoes	652	65,300 *	31,235
Vegetables	715		23,820
Total			\$1,197,295
LIVE STOCK AND PRODUCTS			
KIND	NUMBER	VALUE	
Cattle	18,699	\$ 467,475	
Horses	7,695	461,700	
Mules	2,175	141,375	
Asses and Jennets	83	7,470	
Sheep	18,527	55,581	
Swine	32,423	324,230	
Chickens	92,343		
Turkeys	2,867	58,890	
Geese	3,346		
Ducks	2,204		
Swarms of Bees	734	2,005	
Honey	24,467 †	3,058	
Wool	54,185 †	9,030	
Milk	2,356,776 §	138,860	
Butter	468,541 †		
Eggs	1,615,300	86,915	
Total		\$1,756,589	
* Bushels.	† Pounds.	Dozen.	
† Tons.	§ Gallons.		

Photos in heading: Fruit Scene; Ginseng.



to profit. Soil is gravelly clay loam, of moderate fertility. Subsoil is uniformly of red clay in uplands, in bottoms a rich, sandy alluvium with wealth of humus. Bottom land is selling at \$15 to \$20 an acre; upland valleys, \$5 to \$15, these figures being for improved lands. Unimproved lands and hills and plateaus bring \$2 to \$6.

**FRUIT LANDS:**—Two-thirds of county is adapted to fruit raising. Soil and climate combine thereto. At present, plantings border railroad in southwest corner. Away from railroad peaches are fed to live stock, being so plentiful.

**MANUFACTORIES:**—Several flouring mills, saw mills, stave factories, shingle factories, spoke and axe handle plants, a wool carding machine; small nurseries.

**TRANSPORTATION:**—Memphis route of St. Louis & San Francisco railroad cuts across the southwestern corner. Principal streams afford log transportation.

**MINERAL SPRINGS:**—Blankenship mineral spring, located three miles north of Houston, is a local resort in summer. Very attractive scenery is found at the "Narrows," between east and west prongs of Piney river, three miles west of Houston. Unexcelled fishing is found in the three rivers, noted also for scenery.

**TOWNS:**—Houston, population 514, inland town, is largest. Has flouring mill and planing mill; it is center of ginseng culture. Cabool, situated on railroad, has 471 population; it is a leading shipping point; has flouring mill. Licking, 193, in northeast part of county, has flouring mill and is purchasing point for that section. Summerville and Plato are trading points of importance.

**GINSENG:**—Grown in specially prepared native soil of leaf mould and shaded by awnings of leaves and branches. Planting is only expense, except that of replacing branch coverings each spring, which is slight. Four-year-old roots lose two-thirds weight in drying. Market is found in New York.

**NEWSPAPERS:**—Houston Herald, Star, Republican; Cabool News.





## VERNON



**V**ERNON is situated one hundred miles south of Kansas City. Among its products corn is king. Cattle and horses are next in rank with export surplus exceeding two millions of dollars annually. Hay and hogs add the third of the six and one-half millions of dollars worth of farm surplus. Coal is a prominent factor in income. In molasses, nuts, castor beans and plums the county leads Missouri. Nevada, county seat of Vernon, is famed as a central market for these products, for its schools and colleges, location of a State Hospital for Insane, and for Lake Park, with its boating and bathing, summer theater, its flowers and walks and driveways and groves, enjoyed by hundreds of visitors during the summer season. The park embraces 132 acres. Farm lands are assessed upon a basis of \$12,029,592, fifty per cent of actual value. Area in square miles, 850, equal to 544,000 acres, of which 408,694 acres are included in improved farms. These number 3,988, averaging 121.6 acres of land of different descriptions.

**POPULATION:**—White, 31,378; colored, 241; American born, 30,595; foreign born, 1,024; total, 31,619. Farm homes owned, 2,495; rented, 1,423; other homes owned, 1,493; rented, 1,286; total families, 6,697.

**FINANCE:**—County tax, 40 cents on one hundred dollars; school tax from 15 cents to \$1.20; average, 66 cents; county debt, \$140,000; no township debt.

**TIMBER:**—Originally one-eighth of surface, located in southeast corner; white oak, black oak, walnut, hickory, elm, ash. Cordwood, \$4 on market; coal is cheaper fuel.

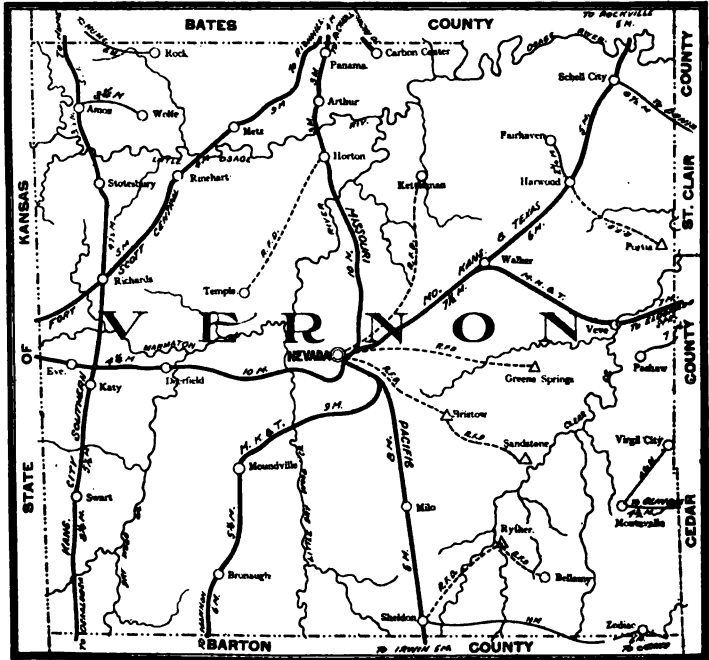
**MINERALS:**—Coal production, 207,125 tons a year; most productive mines south and east of Panama; vein four feet thick; depth, eighty to one hundred and fifteen feet; Harwood and Moundville. Seventh county in coal output. Four hundred men engaged. Coal at banks as low as \$1.25 a ton. Asphaltum in paying quantities located near Bellamy, in south central Vernon. University of Missouri analysis: petroleme, 88.51; asphaltene, 10.23; organic matter, 1.14; mineral matter, 12. This encourages belief that petroleum underlies. Building stone for local rough work is found upon streams.

**LAND:**—Three-fourths of county is undulating prairie. One-fourth is accounted for in breaks made by numerous streams, especially in southeast one-eighth part. Prairie soil is rich black limestone, which grows

VERNON COUNTY'S 1902 CROP			
	ACRES	PRODUCT	VALUE
Corn	156,016	5,928,646 *	\$1,867,525
Wheat	14,238	284,760 *	156,620
Oats	9,814	260,070 *	68,920
Hay	51,346	93,390 †	554,340
Forage	4,425	5,900 †	29,500
Flax	9,172	36,688 *	38,155
Broom Corn	142	78,100 †	2,150
Clover Seed		470 *	2,630
Grass Seed		2,850 *	4,560
Tobacco	21	13,650 †	1,365
Potatoes	1,296	162,000 †	56,700
Vegetables	1,375		61,635
Total			\$2,844,100
LIVE STOCK AND PRODUCTS			
KIND	NUMBER	VALUE	
Cattle	40,672	\$1,321,840	
Horses	15,243	1,016,200	
Mules	3,392	254,400	
Asses and Jennets	67	6,700	
Sheep	5,489	16,405	
Swine	50,840	508,400	
Chickens	194,703		
Turkeys	5,127	156,330	
Geese	2,886		
Ducks	4,774		
Swarms of Bees	4,844	11,874	
Honey	161,467 †	20,183	
Wool	27,970 †	4,662	
Milk	3,629,096 \$	212,050	
Butter	746,158 †		
Eggs	1,195,300	149,412	
Total		\$3,684,456	
* Bushels.	† Pounds.	Dozen.	
† Tons.	\$ Gallons.		

Photos in heading : Railway Station, Nevada; Lake Park, Nevada; Bananas Growing in Open Ground at Dr. A. Churchill's Home, Nevada,

corn, wheat, oats, flax, tame grasses and small fruits. Blue grass is native. Finest farms, outside those adjoining Nevada, are selling at \$40 to \$50. Those excepted sell at \$60 to \$75. One-half of the farms may be bought for \$35. Near Nevada are numerous truck and fruit farms of small acreage, for which would be asked fabulous figures. In river bottoms land ordinarily brings \$20 to \$30; small percentage \$15. These lands overflow; water subsides in five days at outside and without damage to land. In southeast section soil is sandy loam, selling at \$25 to \$35 for well improved farms. Unimproved timber lands are to be had at \$10 to \$15. These are in southeast and are adapted to fruit growing and grazing.



**TRANSPORTATION:**—Railroad center. Miles of taxed track: Missouri, Kansas & Texas, 36.48; same, Eldorado branch, 10.59; Missouri Pacific, Lexington & Southern, 29.03; same, Nevada & Minden, 16.73; same, Ft. Scott branch, 18.51; St. Louis & Santa Fe, Rich Hill branch, .88. Gravel roads, four miles east and west from Nevada.

**SCHOOLS:**—One stone, eight brick and 140 frame school buildings. Average teachers' salary, \$42. Three colleges: Cotter College and St. Francis' Orphans' home and Convent School, at Nevada; and Cooper College, Moundville. First is Methodist school for girls; founded 1884. Cooper College, non-sectarian, preparatory, academic, music and art; established 1892. Convent School, seventeen sisters; 25 boys and girls; Catholic church, Nevada, to which ninety families belong; established 1894. Catholics also have parochial school, established 1904. Nevada Business College, five years old. Nevada High School articulates with State University.

**MINERAL SPRINGS:**—Iron Springs, White Sulphur Springs, Black Sulphur Springs, located in Lake Park, Nevada. Fair Haven Mineral Springs is small summer resort with hotel accommodations. Good fishing in lakes. Nevada has an organized fishing club.

**TOWNS:**—Nevada, junction of Missouri Pacific and Katy railroads, and terminal for other roads; electric line depot to Asylum and to Lake Park; electric lights, gas, waterworks, federal building, one mile brick street paving and four miles of gravel. In manufactures: two brick yards, two ice plants, candy factory, foundry and machine shops; two cigar factories, zinc smelter, planing mill, 300-barrel flouring mill, two grist mills, two poultry packing houses. Schell City, Walker, Richards, Metz, Sheldon, Moundville, and Bronaugh are farming centers.

**NEWSPAPERS:**—Nevada Post, Mail, Herald; Sheldon Enterprise; Walker Herald; Richards Progress; Schell City News; Metz Times.



**W**ARREN is forty miles east of Jefferson City and the same distance west of St. Louis, upon the north side of the Missouri river. Its natural adaptabilities lie in two directions: agricultural and mineral. It embraces 435 square miles of land, 278,400 acres, of which 116,770 acres are cultivable. There are 1,358 farms, embracing in agricultural, timbered, mineral and pasture lands, 160.3 acres on an average, worth an aggregate of \$4,075,225. Five-eighths of the land is timbered with white oak, black oak, walnut, linden, cottonwood, and cedar. Here are minerals, clays of all kinds. Vast deposits of clay occur near Bridgeport and along the river bluffs from a few miles east of Holstein to a point three miles east of Marthasville. This is shipped from Warrenton and Marthasville, and utilized within the county for ballast, after being burned. Clay is drift formation and forms immense hills. Surface mining is employed wholly. A spur of Wabash railroad

opens up one section, running two miles southeasterly from Truesdale. Sandstone, cotton rock and brown granite are found along central section streams and in juxtaposition with clay deposits upon the river. Sand is plentiful along the Missouri river.

**LAND:**—Warren county land may be divided into four classes: first and most valuable is Missouri river bottom, varying in width, bounded upon north by bluffs traced by the Missouri, Kansas & Texas railroad track. Prices range according to improvement and elevation of land, from \$40 to \$100. Most farms bring \$50, \$60, and \$65. North of this line, touching Bridgeport and Tuque, is a second line defining northern limit of most valuable bluff land. It is especially favorable to wheat and fruit. Price, \$10 to \$40, frequent creek bottom land being best. Water which falls upon Warren county drains in two principal directions. Northern side drains into the Mississippi river and that south of dividing ridge flows immediately into the Missouri. Clay ridge occupies six miles of space, bounded on the south by the line through Bridgeport and Tuque, and on the north by one east and west through Warrenton. The clay surface is rugged and rocky. Prices are from \$2 to \$8; half a dozen farms adjoining Warrenton held at \$30 because of location. Entire strip is thickly timbered. North of the clay ridge are two kinds of land: first, which in character is like that lying immediately north of Missouri river bottom, is of like price. The

WARREN COUNTY'S 1902 CROP			
	ACRES	PRODUCT	VALUE
Corn	33,170	1,734,840 *	\$ 526,075
Wheat	29,690	682,825 *	409,695
Oats	10,455	345,015 *	86,255
Hay	9,400	14,105 †	84,630
Forage	730	850 †	4,250
Broom Corn	2	1,000 †	30
Clover Seed		240 †	1,585
Grass Seed		60 †	85
Tobacco	21	19,950 †	1,795
Potatoes	525	78,750 *	19,690
Vegetables	360		18,855
Total			\$1,152,945
LIVE STOCK AND PRODUCTS			
KIND	NUMBER		VALUE
Cattle	11,941		\$ 388,080
Horses	3,709		247,285
Mules	1,581		118,575
Asses and Jennets	18		1,800
Sheep	3,626		11,480
Swine	19,169		191,690
Chickens	138,501		
Turkeys	1,737		68,350
Geese	2,736		
Ducks	1,005		
Swarms of Bees	562		1,155
Honey	18,793 †		2,340
Wool	18,300 †		3,050
Milk	1,207,500 †		74,890
Butter	196,126 †		
Eggs	737,580 †		92,105
Total			\$1,200,870
* Bushels.	† Pounds.	Dozen.	
† Tons.	§ Gallons.		

*Photos in heading: A Truesdale Fire Clay Mine, 70 Feet Face; The Canon on Charrette; Farm Scene.*

balance, occupying the western half of most northern township, and as far south as Pendleton, is high, rolling prairie, worth \$30 to \$50 an acre, dependent upon improvement and distance from town. Agriculturally, one-third of Warren is wasteland, upon the dividing ridge. Hill land is favorable to fruit trees and there are two commercial orchards near Warrenton.

**MANUFACTORIES:**—A wagon factory at Wright City employs fifteen men; fire-clay pit, south of Warrenton, twenty-five men; brick yard at Warrenton; flouring mills at Warrenton, Wright City and Marthasville.

**TRANSPORTATION:**—Three railroads: Missouri, Kansas & Texas, 30 miles; Wabash, 25 miles; Burlington, 4 miles, paralleling through the south, middle and northern portions respectively; lines trending east and west Kansas City to St. Louis. Missouri river is the only navigable waterway.

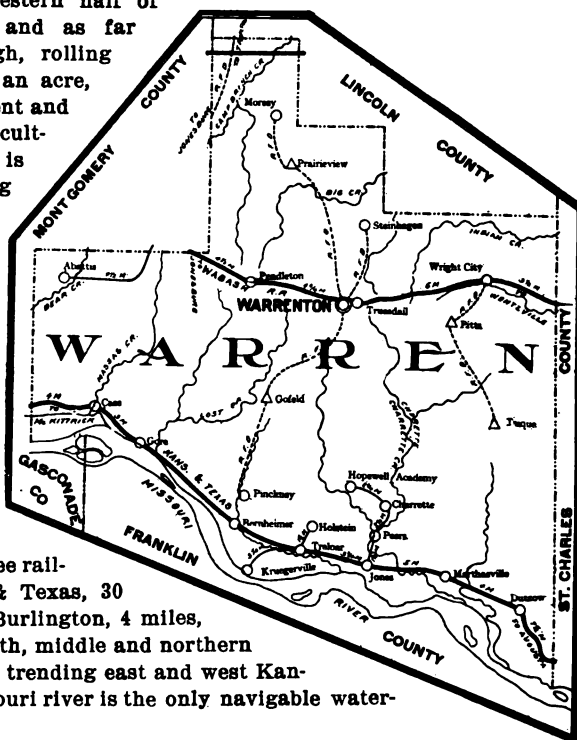
**CENTRAL WESLEYAN COLLEGE:**—Located at Warrenton; has enrollment of 335; under direction of German Methodist Episcopal church. Excepting theological, all courses are taught in English. Established 1864; productive endowment, \$75,000; five buildings, worth \$75,000. Co-educational; twenty-seven professorships and instructorships. Military department, normal and business departments, besides collegiate and music.

**POPULATION:**—White, 9,297; colored, 626; American born, 8,818; foreign born, 1,101; total, 9,919. Farm homes owned, 1,022; rented, 325; other homes owned, 312; rented, 282; total families, 1,941.

**FINANCE:**—County tax, 50 cents; school tax, 10 to 80 cents; average, 37 cents; total assessed valuation, \$3,716,915; one-third of real valuation; no county debt; no township debt.

**TOWNS:**—Warrenton, county seat, home of Central Wesleyan College; Marthasville, Wright City, Holstein, Peers and Pendleton; all supported largely by farming.

**NEWSPAPERS:**—Warrenton Volksfreund; Banner, Central Wesleyan College Star, Herald; Marthasville Record.





**S**OUTH of St. Louis, two hours' journey by rail, is Washington county, fifty miles south of the Missouri and scarce forty miles west of the Mississippi river. It is a land of minerals. In shipment of baryta it is first of Missouri's counties. This mineral is found in many different places and in great quantities. Lead is mined. In 1797 a lead mine was operated at Potosi, county seat. Lead furnaces followed shortly, under patronage of the Spanish government, which sought thus to encourage development of the famous southeast Missouri lead district, about which even then fabulous tales were told. Topographically, the county is rough. Less than one-fourth is now devoted to culture of grain. Horticulture is gaining headway. Lumber interests draw upon both hardwood and yellow pine, the latter being in the western section and amounting to ten per cent of the timber. Another feature of which the county boasts is its rock road system, centering at Potosi. These roads spread in four

directions and embrace sixty miles in length. County contains 780 square miles, 499,200 acres, in land surface, 93,743 acres devoted to the plow. There are 1,724 farms, embracing 123.6 acres each on an average, counting cultivated, pasture and timber lands.

**POPULATION:**—White, 13,622; colored, 641; American born, 14,015; foreign born, 248; total, 14,263. Farm homes owned, 1,068; rented, 723; other homes owned, 350; rented, 661; total families, 2,802.

**FINANCE:**—County tax, 40 cents on one hundred dollars; school tax, from 10 cents to \$1.30; average, 46 cents; total assessed valuation, \$3,146,020; assessed valuation estimated to be one-half actual valuation, no county nor township debt.

**TIMBER:**—Four hundred thousand acres are yet timbered with all varieties of oak, yellow pine, hickory, sycamore, ash, maple, walnut, elm. White oak represents thirty-five per cent; most abundant in northeastern and southwestern corners. Black oak covers twenty-five per cent of the quantity; chiefly in western and southwestern parts; black-jack exists to approximately fifteen per cent; pine represents ten per cent, but is rapidly disappearing. It is in the western part, east of Fourche a Renault creek, and along some of its tributaries. Post oak amounts to five per cent in eastern part. Hard maple is a valuable timber along creeks in certain localities. Maple sugar is made from the sap.

WASHINGTON COUNTY'S 1902 CROP			
	ACRES	PRODUCT	VALUE
Corn	21,800	1,119,423 *	\$419,785
Wheat	10,000	413,110 *	243,735
Oats	2,000	86,760 *	28,920
Hay	10,000	17,220 †	154,980
Forage	1,000	1,815 †	9,225
Broom Corn		3,500 †	95
Clover Seed		35 *	19
Tobacco	20	20,590 †	2,060
Potatoes	449	53,680 *	25,860
Vegetables	525		24,485
Total			\$909,340
LIVE STOCK AND PRODUCTS			
KIND	NUMBER	VALUE	
Cattle	15,422	\$385,550	
Horses	3,658	219,480	
Mules	1,656	107,640	
Asses and Jennets	21	1,890	
Sheep	6,569	19,707	
Swine	20,111	201,110	
Chickens	52,084		
Turkeys	2,116		
Geese	1,655	35,160	
Ducks	1,424		
Swarms of Bees	455	1,190	
Honey	15,167 †	1,896	
Wool	18,710 †	3,118	
Milk	1,369,205 §		
Butter	273,427 †	81,090	
Eggs	316,350 †	39,545	
Total		\$1,097,376	
* Bushels.	† Pounds.	Dozen.	
† Tons.	§ Gallons.		

Photo in heading: Washington County Farm Scene.

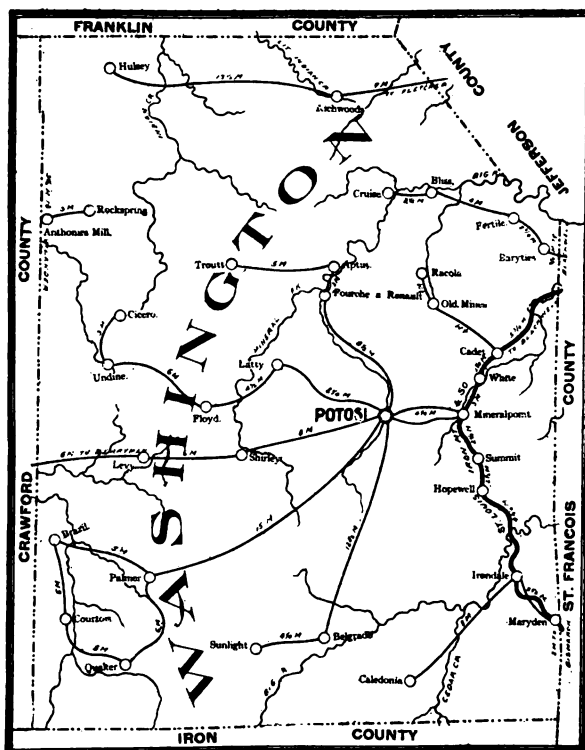
**MINERALS:**—Baryta, lead, zinc, iron, copper, brick and pottery clays, limestone, sandstone, marble and whetstone. Developed districts are around Palmer, where lead is mined; Potosi, location of lead and tiff; Shibboleth, lead and tiff; Old Mines, lead and tiff; Richwoods, and Kingston, lead and tiff. Iron is found in northwest, southwest and southeast corners of the county. Copper is found in northeast. Zinc is mined near Potosi.

**LAND:**—There are three general classes of lands: farming, mineral and fruit. The northeast is a tableland, which is best for farming purposes. It sells at \$20 to \$30 an acre, under cultivation. Tablelands also occur in the southeast and are valued at \$20 to \$25 an acre; likewise along the Potosi branch of the Iron Mountain railroad. Bottom lands in the interior, improved, are selling at \$10 to \$15; ridges at \$3 to \$5 an acre. In the northeast, southeast, and much of the east, the land is gently rolling, but is elsewhere generally rough. All upland soil is gravel-laden and sometimes stony. Usually there is a red gravelly clay subsoil.

Government lands to extent of 2,242 acres are available at \$1.25 per acre. All the land outside bottoms, is adapted to fruit growing. Wild land near railroad may be had at \$5 to \$6 an acre; and same in interior at \$2 an acre. Cultivated fruit land from \$5 to \$10 an acre.

**TRANSPORTATION:**—St. Louis, Iron Mountain & Southern railroad, main line and Potosi branch. Potosi rock road system.

**WATER:**—Big river, Indian creek, Big and Little Fourche a Renault creeks, Curtois and Mine a Breton creeks are chief water sources. Many springs con-



CORN FIELD, WASHINGTON COUNTY.

tribute to these streams. Fishing is afforded by all streams.

**TOWNS:**—Potosi, county seat, population 638; has flouring mill, stave factory, lead and baryta mines. Irondale, mining town; Caledonia, flouring mill and mineral interests. Belgrade, center of farming region; flouring mill. Richwoods, farming and mining. Palmer, mining. Undine, saw mill and shingle mill. Shirley and Blackwell have lumbering.

**NEWSPAPERS:**—Potosi Independent, Journal; Irondale Gazette.



**Y**ELLOW pine lumber has ever been the base for labor and commerce in Wayne county. Originally the quantity of pine timber exceeded that of oaks, cottonwood, elm, red gum, hard maple, or sycamore, other prominent varieties. Twenty saw mills operate within the county, one at Leeper and another at Greenville, having daily capacities of two hundred thousand feet. One-fifth of the timber, 83,022 acres out of 512,000, has been clean cut and land subjected to the plow. Pine has nearly all been removed from the eight hundred square miles of county surface. Mills are now drawing material from surrounding counties in the pine belt of Missouri. Farms raise corn and live stock, latter having access to two hundred thousand acres of free, blue stem range. Actual value of farm lands, \$2,261,298.

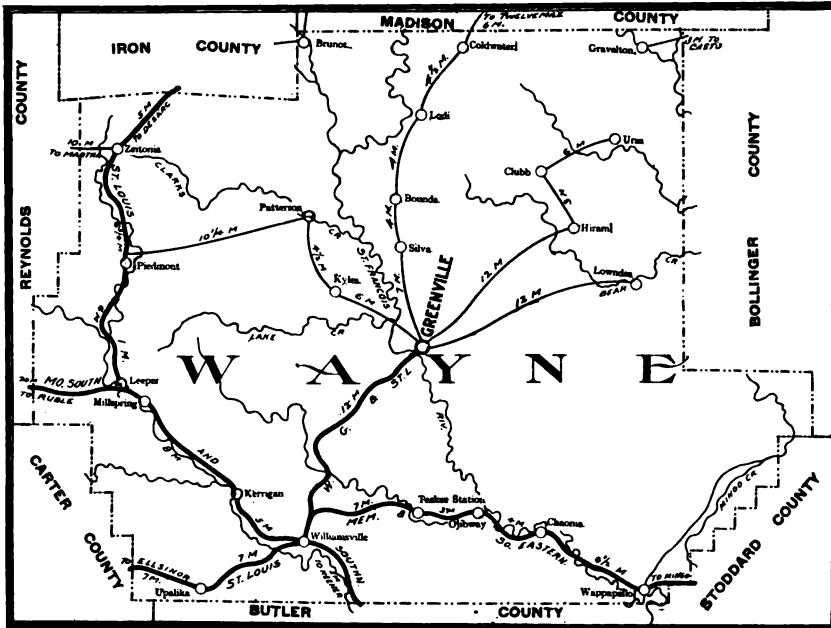
**IRON ORE AND BUILDING STONE:**—Former is surface gathered and by wagon loads hauled to railroad towns, to market. Building stone is plentiful, both lime and sand. In towns are found business blocks and residences made of hand hammered stone from local quarries. It is not shipped.

**LAND:**—Wayne county's surface is for the most part exceeding hilly; even mountainous in the northwest. River valleys, 13,500 acres of lowlands fringing southeast border, and approximately two thousand acres of flatwoods immediately south of Greenville, constitute the exception. Wild mountain land can be bought, pine timber removed, for \$1.25 an acre. Flatwoods, which is mountain plateau land with less timber than hills, is worth \$5. Swamp lands, comprising one-tenth of the county, bring \$4 to \$10 in the timber. River bottom farms adjoining St. Francois, Black and Castor rivers, well improved, bring \$25 to \$35, a very small acreage. Creek bottom lands, improved, run from \$10 to \$20; soil, mulatto alluvial. Hill soil is of two kinds: limestone, free from surface rock, centering around Patterson; and a gravelly clay, with surface rock. Former embraces some of the best farms, worth \$10 to \$20 an acre; uncleared, \$2 to \$5. The latter, post oak land, worth \$3 to \$6, cleared, and less when in timber. In the 2,500 acres adjoining Greenville, one-half is cleared. Best farms have sold for \$50 adjoining town. Within a mile, however are timbered lands at \$1.50 an acre.

**YELLOW PINE LUMBER.**—For many years Wayne led in shipment of yellow pine lumber. As other counties yielded to the saw it divided honors, in which position

WAYNE COUNTY'S 1902 CROP			
	ACRES	PRODUCT	VALUE
Corn	83,335	970,730 *	\$ 364,030
Wheat	8,526	119,365 *	70,425
Oats	2,375	65,310 *	21,770
Hay	8,367	11,715 †	117,150
Forage	2,495	2,910 †	14,550
Broom Corn	13	6,500 †	180
Grass Seed		20 †	45
Tobacco	33	23,430 †	2,345
Potatoes	515	46,350 *	22,250
Vegetables	685		34,050
Total			\$ 646,785
LIVE STOCK AND PRODUCTS			
KIND	NUMBER	VALUE	
Cattle	14,261	\$320,872	
Horses	2,401	144,060	
Mules	1,643	98,680	
Asses and Jennets	32	2,880	
Sheep	4,210	12,630	
Swine	27,399	272,930	
Chickens	65,568		
Turkeys	639		
Geese	5,387	37,265	
Ducks	3,227		
Swarms of Bees	1,340	2,815	
Honey	44,667 †	5,583	
Wool	14,960	2,477	
Milk	1,248,619 †	106,240	
Butter	259,891 †	41,860	
Eggs	334,864 †		
Total		\$1,048,252	
* Bushels.	† Pounds.	‡ Dozen.	
† Tons.	§ Gallons.		

Photos in heading: Saw Mill at Leeper; Wayne County Scene.



it stands to-day. Two large saw mill companies operate mills, cut timber in forests, employing 2,000 men. At Greenville lumber is planed, mill being of 150,000 feet daily capacity.

**TRANSPORTATION:**—Missouri Southern, 4.24; Iron Mountain, 32.34; Southern Missouri & Arkansas, 32.74; Williamsville, Greenville & Arkansas, 25 miles of taxed roadbed.

Concordia College, at Gravelton, has an enrollment of 60.

**SPRINGS AND CAVES:**—Near Bruno, Patterson and Lick Valley Springs are outcropping streams of clear water, claimed to possess medicinal value. Holmes' Cave, ten miles north of Greenville, is eighty yards deep and twelve feet entrance.

**TOWNS:**—Piedmont is largest, supported by Iron Mountain freight division point, farming and timber. Greenville, county seat, supported by milling; Williamsville is a railroad junction; Leeper is a mill town.

**POPULATION:**—White, 15,194; colored, 115; American born, 15,183; foreign born, 126; total, 15,309. Farm homes owned, 1,239; rented, 538; other homes owned, 302; rented, 920; total families, 2,999.

**FINANCE:**—County tax, 40 cents; school tax, five cents to \$1.30; average 59 cents; total assessed valuation, \$3,304,638; thirty-three per cent of actual valuation, on improved lands; \$1.25 an acre on wild lands. No county debt; no township debt.

**NEWSPAPERS:**—Piedmont Banner, Greenville Journal, Greenville Sun.



WAYNE COUNTY TIMOTHY.





**W**EBSTER is one of the foremost of those counties which won for south Missouri the significant title "Land of the Big Red Apple." Two hundred miles southwest of St. Louis, on the Frisco railroad, it embraces a vast acreage of table lands of the Ozark mountains. Apples afford the chief income. The Winans apple orchard, near Marshfield, contains 86,000 apple trees, 40,000 peach trees and 10,000 pear trees. Numerous orchards of eighty to three hundred acres are found. Estimated total number of trees, 800,000.

**TIMBER:**—Originally ninety per cent of the land was timbered, consisting of white oak, black oak, and hickory. Thirty-five per cent is cleared and thirty per cent of the balance has been relieved of commercial size trees. A dozen portable saw mills operate, selling native hardwood lumber at \$1 and \$1.25 per hundred feet. Cedar, elm and sycamore timber borders creeks. Cordwood sells at \$1.50; railroad ties are sold at 25 to 30 cents.

Limestone, sandstone, tiff and lead exist, but no active mines operate.

**POPULATION:**—White, 16,524; colored, 116; American born, 16,413; foreign born, 227; total, 16,640. Farm homes owned, 1,881; rented, 665; town homes owned, 425; rented, 357; total number of families, 3,328. Bohemian settlement three miles southwest of Marshfield.

**LAND:**—There are 630 square miles, 403,200 acres of land, of which 143,960 acres are included in improved farms. These are in number 2,500, of an average size of 105.3 acres, and an estimated value of \$3,280,194. Next to apples the leading products are corn, cattle, horses, wheat, hogs, and butter, in order. Webster occupies the highest average elevation of any county in Missouri. There extremes are 1,690 and 1,092 feet above sea level. It contains many acres of undulating, tillable, tableland, unimproved. One-half of the county is tableland.

WEBSTER COUNTY'S 1902 CROP			
	ACRES	PRODUCT	VALUE
Corn	36,459	1,276,065 *	\$401,980
Wheat	25,696	411,135 *	226,125
Oats	7,085	230,265 *	61,020
Hay	20,143	30,215 †	176,185
Forage	1,485	1,980 †	9,900
Broom Corn	5	2,750 †	75
Clover Seed		270 *	1,510
Grass Seed		75 *	120
Tobacco	42	27,300 †	2,730
Potatoes	576	57,600 *	20,160
Vegetables	780		36,410
<b>Total</b>			<b>\$936,195</b>
LIVE STOCK AND PRODUCTS			
KIND	NUMBER	VALUE	
Cattle	14,290	\$392,975	
Horses	6,050	368,000	
Mules	2,193	142,545	
Asses and Jennets	85	7,650	
Sheep	13,204	39,610	
Swine	21,015	210,150	
Chickens	81,901		
Turkeys	3,410		
Geese	3,148	70,700	
Ducks	1,983		
Swarms of Bees	1,380	3,887	
Honey	46,000 †	5,750	
Wool	44,370 †	7,395	
Milk	1,981,400 †		
Butter	415,140 †	115,500	
Eggs	525,260 †	65,660	
<b>Total</b>		<b>\$1,424,822</b>	
* Bushels,	† Pounds,	‡ Dozen.	
† Tons.	§ Gallons.		

Photo in heading: In a Webster County Orchard.

Soil here is dark, vegetable loam, from one to three feet in depth, over a red, gravelly clay. It grows clover, timothy, oats, wheat, corn, vegetables, and especially fruits and grasses. Bluestem grass grows wild and blue grass, when sown, easily crowds out all others. One-half of these lands are under cultivation; worth \$10 to \$15, occasionally \$20. A large per cent of the unimproved tableland is held by local agents who are disposing of it to homeseekers upon time payments. Ten per cent is bottom land, of creeks and rivers, worth \$15 to \$20. Here the soil is black loam of inexhaustible depth. Remaining forty per cent is mountainous, located mainly south of the Kansas City, Fort Scott & Memphis railroad, and in the north and east parts of the county, along the streams. Hills are in instances 700 feet above adjacent valleys. Government land, 268 acres, is herein situated. Rough land sells up to \$5 an acre. It is generally too rough for grain, but it is favorable to apple trees. Surface of rough land bears small rocks. Tablelands generally free from rock. Estimated acreage of land owned by foreign corporations and non-residents, seventy-five thousand.

**DAIRIES:**—Four large dairies and several farmers sell \$100,000 to \$125,000 worth of butter and milk annually. Largest establishment maintains 80 to 100 cows.

Butter, brick, and flour are the leading factory products.

**TRANSPORTATION:**—Frisco main line, St. Louis to Springfield, 25.20; Kansas City, Fort Scott & Memphis (Frisco lease), 23.71 miles within the county.

**SPRINGS:**—By actual count, Webster county has more than 2,400 living springs of clear water. Marshfield is 1,487 feet above sea-level, upon a level plain, yet there are six within a half mile of the court house. Dug wells are twelve to twenty-five feet deep.

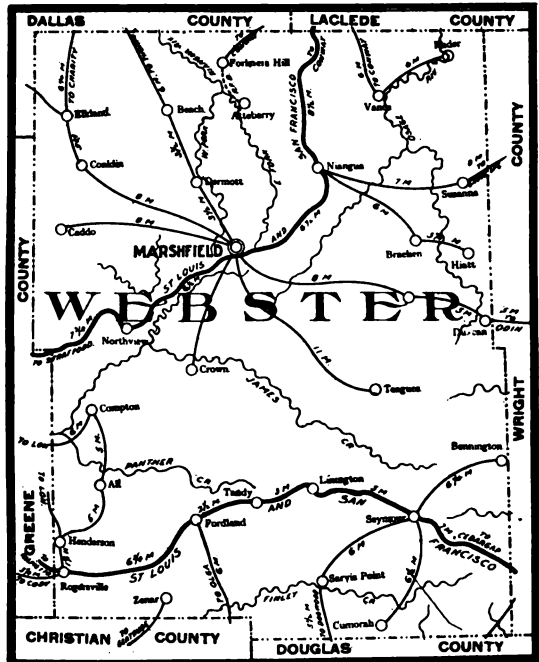


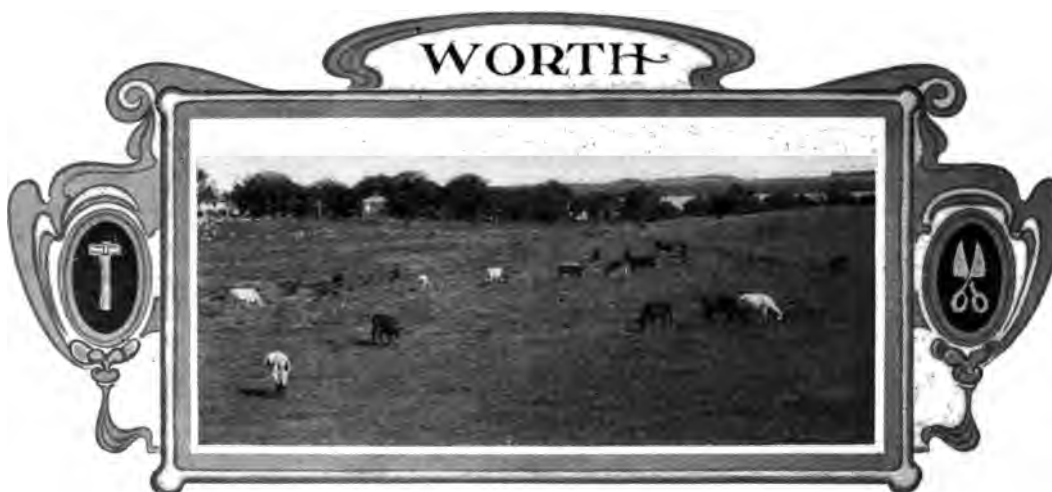
**Towns:**—Marshfield, county seat; Seymour, Fordland, Rogersville and Niangua are the chief towns, supported wholly by horticultural and agricultural interests. There are 31 postoffices, 17 of which receive daily mail, and 14 receive mail three times a week.

The atmosphere in this section of Missouri is most exhilarating—a seductive factor.

**FINANCE:**—County tax, 40 cents on one hundred dollars; school tax, average, 38 cents; total assessed valuation, \$2,000,000; assessed valuation per cent of real valuation, 40; no county debt; no township debt.

**NEWSPAPERS:**—Marshfield Chronicle, Mail; Seymour Flashlight; Fordland Monitor.





**W**ORTH is situated upon the Iowa State line, seventy miles east of the Missouri river, at a point separating Missouri and Nebraska. In physical size it is the smallest county in Missouri. It embraces but 270 square miles, 172,800 acres. Farming, stock raising, poultry, and dairying are the leading activities. At Grant City, county seat, a new thirteen-room high school building has been recently completed, illustrating the basis of the remark that "Schools are a fad of Worth county." Improved farms include 119,169 acres of arable land. These number 1,549, average size, 106.4 acres, worth in aggregate, \$4,212,080.

**POPULATION:**—White, 9,824; colored, 8; American born, 9,644; foreign born, 188; total, 9,832. Farm homes owned, 1,064; rented, 430; other homes owned, 376; rented, 217; total families, 2,087.

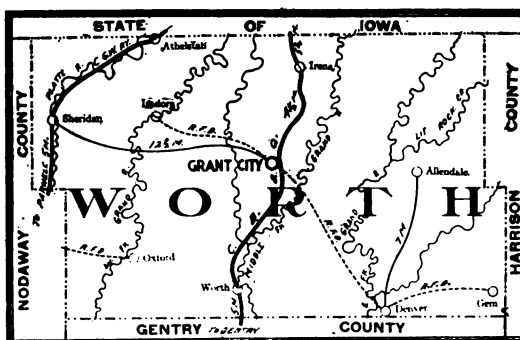
**FINANCE:**—County tax, 40 cents; school tax, 25 cents to \$1.50; average, 54 cents; total assessed valuation, \$3,498,680; assessed valuation per cent of real valuation, 33 1-3; county debt, \$25,000; no township indebtedness.

**LAND AND APPURTENANCES:**—One-third of land was once timbered with oak, walnut, elm, linden, hickory, following streams and varying in width up to an extreme of two miles. Groves of walnut and oak existed in eastern half. One of these contained ten thousand acres. Three-fourths timber has been removed. Saw mills are portable. Native oak lumber, \$2.50 per hundred feet, board measure. Cordwood, \$3 on town market; \$1.50 in woods; 50 cents in tree. Posts plentiful, worth 15 cents. Stone is available for foundation work. Found upon East Grand river. No other minerals. Surface is uniformly high, long-rolling prairie hill land, with deep-set streams of small size. Four small rivers traverse Worth county, paralleling to the southward. These have generous valleys adjoining. Next to this lies land of steep ascent, hills reaching in places one hundred and fifty feet above valley, gradually lengthening as one travels from the river, until is reached the similar approach to the next stream. One-fourth of the land, which is more level on the prairie, sustains a soil of dark alluvial, one to three feet in depth. It is adapted to corn, oats, rye and grasses. Oak and hickory lands of the once wooded portion, have soil a shade lighter in color, less deep, and are adapted to fine

WORTH COUNTY'S 1902 CROP			
	ACRES	PRODUCT	VALUE
Corn	52,692	2,002,296 *	\$630,725
Wheat	1,006	19,115 *	10,990
Oats	4,785	142,950 *	37,165
Hay	20,449	30,750 †	153,760
Forage	5,540	7,885 †	36,925
Flax	2	20 *	20
Broom Corn	42	23,100 †	635
Clover Seed		40 *	220
Grass Seed		2,700 *	4,185
Tobacco	6	5,400 †	540
Potatoes	623	71,615 *	17,195
Vegetables	575		23,360
Total			\$915,710
LIVE STOCK AND PRODUCTS			
KIND	NUMBER	VALUE	
Cattle	23,994	\$779,705	
Horses	7,411	494,065	
Mules	709	53,175	
Asses and Jennets	41	4,100	
Sheep	8,941	29,805	
Swine	37,354	373,540	
Chickens	99,402 †		
Turkeys	3,515 †		
Geese	2,694 †	85,805	
Ducks	2,285 †		
Swarms of Bees	1,584	4,195	
Honey	52,800 †	6,600	
Wool	43,500 †	7,250	
Milk	1,794,248 †	89,890	
Butter	348,450 †		
Eggs	714,050 †	89,255	
Total		\$2,017,385	
* Bushels.	† Pounds.	Dozen.	
† Tons.	\$ Gallons.		

Photo in heading: Farm Scene in Worth County.

crops of wheat, clover, and fruits. They should be plowed deeply. Valley lands have an imperishable alluvial soil, loose and flexible, adapted to corn. Clay underlies all soils. Uplands west of West Fork of Grand river or within five miles of the Chicago, Burlington & Quincy railroad, sell at \$50 to \$60 an acre. A little of the rougher land—not over one-tenth—can be bought for \$35. Possibly there are one thousand acres that can be bought at \$30. Bottom land near the railroad, sells at \$60 to \$70; elsewhere for \$45 to \$55. On one road leading out of Grant City, the first twelve farm homes will average a value of \$1,000 each; all over the county the average would be approximately \$600. East-county lands are a shade cheaper than same land in west Worth.



**MANUFACTURED PRODUCTS:**—Include flour, corn meal, hardwood lumber, fence posts, cheese, brick, and tile.

**TRANSPORTATION:**—The railroads: Chicago & Great Western, 8.92; Chicago, Burlington & Quincy, 14.19 miles taxable roadbed. Drag system is used upon dirt roads.

**CHURCHES:**—Grant City, largest town, has five, representing four Protestant and one Catholic organizations.

**HIGH SCHOOL:**—Grant City High School is conforming to courses of study approved by the University of Missouri.

**WATER:**—Stock water and water for household purposes comes chiefly from wells twenty to thirty-five feet deep. It is of limestone leaning. One mineral spring, located at Denver.

**TOWNS:**—Grant City, built around court house square; waterworks, electric lights, new \$26,000 high school building; Sheridan, Denver, Allendale, Worth, Oxford, Athelstan, all farm trading points.

**DAIRYING:**—Within the last few years has enjoyed remarkable growth. Cream is shipped to St. Joseph.

**NEWSPAPERS:**—Grant City Star, Times; Sheridan Advance.



# WRIGHT



**W**RIGHT is in the heart of Missouri's "Land of the Big Red Apple." The county is situated one hundred miles east of the Kansas line and forty miles north of Arkansas. All the advantages of soil, subsoil and climate it has. A large acreage adjoining the Frisco railroad is horticulturally improved. The extreme northern side of the county awaits transportation facilities. Missouri State Fruit Experiment Station is located at Mountain Grove. Apples, peaches, strawberries, and pears are practically sure crops. Mineraally, too, the county is wealthy. Onyx is found in caves. Lead, zinc, iron and limestone are deposited. More than three hundred

thousand acres bear remarkable timber and everywhere is bluestem grass of value to stock raising. County contains 700 square miles, equal to 448,000 acres of surface; 139,272 acres being under cultivation. There are 2,726 farms, averaging 119.8 acres each, estimated to be worth a market price of \$2,858,518.

**POPULATION:**—White, 17,091; colored, 428; American born, 17,285; foreign born, 234; total, 17,519. Farm homes owned, 2,058; rented, 716; other homes owned, 336; rented, 348; total families, 3,458.

**FINANCE:**—County tax, 50 cents on one hundred dollars; school tax, average, 50 cents; total assessed valuation, \$2,985,196; assessed valuation per cent of actual valuation, 50; no county nor township debt.

**TIMBER:**—Originally covered with white oak, black oak, post oak, black-jack, and elm, maple, ash, sycamore, redbud, linden, hickory and walnut along streams. Commercial white oak now remains in western part and along Gasconade river bluffs. Black oak is even more plentiful.

**MINERALS:**—Lead, zinc, copper, iron, onyx, limestone, sandstone, are the minerals found. Mining is only in small way developed in southwest corner of county, at Lead Hill, and vicinity, where lead and zinc are taken from the earth. Onyx has been found in the southern part and probably exists in unexplored caves elsewhere. Limestone and sandstone are found practically everywhere.

WRIGHT COUNTY'S 1902 CROP			
	ACRES	PRODUCT	VALUE
Corn	37,020	110,600 *	\$349,840
Wheat	17,784	266,460 *	146,555
Oats	3,969	119,070 *	31,555
Hay	17,415	21,360 †	158,470
Forage	1,985	22,645 †	18,225
Broom Corn	9	4,950 †	135
Clover Seed		15 †	85
Grass Seed		50 *	80
Tobacco	60	39,000 †	3,900
Potatoes	427	38,480 †	13,450
Vegetables	725		30,480
Total			\$747,775
LIVE STOCK AND PRODUCTS			
KIND	NUMBER	VALUE	
Cattle	13,193	\$329,825	
Horses	5,744	844,640	
Mules	1,546	92,760	
Asses and Jennets	66	5,940	
Sheep	16,686	50,060	
Swine	19,953	199,530	
Chickens	64,760		
Turkeys	2,462		
Geese	2,757	48,850	
Ducks	1,494		
Swarms of Bees	604	1,570	
Honey	20,183 †	2,517	
Wool	50,150 †	8,358	
Milk	1,390,530 †	109,975	
Butter	222,706 †		
Eggs	609,920	76,240	
Total		\$1,270,265	
* Bushels.	† Pounds.	Dozen.	
† Tons.	‡ Gallons.		

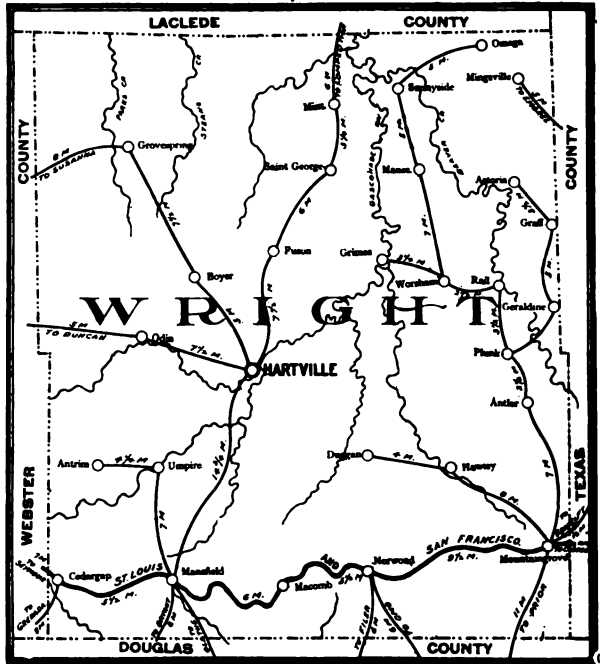
Photos in heading: Showing Principal Products of Wright County.

**LAND:**—County includes much good farming land. Soil is deep, gravelly, clay loam of more than ordinary fertility. Subsoil is usually red clay with ordinarily a generous admixture of gravel, thus rendering it porous and giving excellent drainage to plant roots. Aside from the bottoms, the best agricultural lands are to be found in the center of the county, near Hartville; in the western and in the southwestern localities, and in the vicinity of Mountain Grove. Bottoms are valued at \$15 to \$20 per acre, and improved ridge and tablelands, \$5 to \$10. The unimproved lands may be bought for \$2 to \$5. Government lands embrace 2,540 acres, which are subject to homestead at \$1.25 an acre. This acreage is scattered over county in small tracts. Wright county is congenial to the growth of apples, peaches, pears, plums, grapes and all of the berries. Best of fruit lands may be bought in northern part at \$3 to \$5, and in south end, close to railroad, for \$5 to \$10.

**TRANSPORTATION:**—Memphis route of St. Louis & San Francisco railroad passes through the southern side.

**WATER:**—Gasconade river flows through the county from south to north. Secondary streams are Beaver, Elk, Whetstone, Steens and Bryant's. Perhaps the most impressive mountain scenery in Missouri is at Cedar Gap.

**TOWNS:**—Mountain Grove, population 1,004, fruit, farming and live stock center; has flouring mill, planing mill and canning factory; location of State



WRIGHT COUNTY LANDSCAPE.

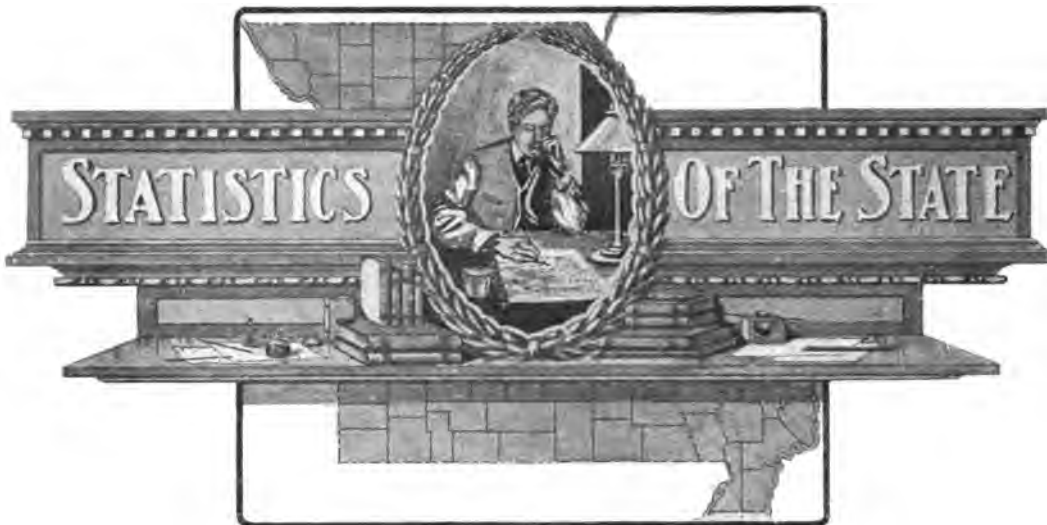
Fruit Experiment Station; unusually good schools. Mansfield, population 494, railroad, mail and shipping point of importance. Hartville, 445, county seat. Norwood, Odin and Grove Spring each has flouring mill. Cedar Gap, Lead Hill, Astoria, Whetstone, and Macomb are supported by farming and timber interests.

**NEWSPAPERS:**—Hartville Democrat, Progress; Mansfield Mail; Mountain Grove Journal, Advertiser; Glenn's Sunday Clipper.



NEAREST  
RAILROAD  
DISTANCES  
BETWEEN  
MISSOURI  
TOWNS

MISSOURI TOWNS	SAINT LOUIS	KANSAS CITY	SAINT JOSEPH	SPRINGFIELD	SEDALIA	HANNIBAL	JOPLIN	MOBERLY
Aurora	269	233	296	31	173	389	98	246
Boonville	171	60	123	177	35	118	189	38
Brookfield	224	122	103	312	130	104	289	57
Butler	287	72	135	119	99	242	95	194
Cameron	291	55	35	245	149	171	222	124
Carrollton	211	66	101	256	146	133	233	63
Carthage	313	150	213	111	137	280	18	210
Chillicothe	225	86	77	276	150	130	253	77
Clinton	228	88	151	102	40	183	115	113
Columbia	146	175	200	208	66	116	220	46
DeSoto	42	319	369	244	230	162	373	190
Fulton	134	186	216	231	90	102	244	62
Hannibal	120	199	207	285	143		298	70
Harrisonville	259	44	107	145	71	214	123	144
Independence	273	10	73	179	85	228	157	139
Jefferson City	125	158	221	205	63	128	218	88
Joplin	331	167	230	129	155	298		228
Kansas City	277		63	190	94	199	167	129
Kirksville	205	180	138	272	130	89	285	57
Lamar	303	128	191	63	115	258	39	188
Lexington	240	43	106	233	56	196	210	96
Louisiana	94	213	233	291	149	26	304	96
Macon	171	152	137	238	96	70	251	23
Marshall	239	84	147	210	68	155	251	53
Maryville	318	105	42	295	199	223	172	170
Mexico	110	162	192	255	111	57	268	38
Moberly	148	129	160	215	73	70	228	
Nevada	278	103	166	88	90	233	64	163
Palmyra	135	111	182	284	128	15	297	55
Pleasant Hill	249	34	97	155	61	204	133	134
Poplar Bluff	166	443	493	212	358	286	341	314
Rich Hill	299	84	147	107	109	252	83	182
Richmond	244	49	68	239	143	166	216	96
Sedalia	188	94	157	142		143	155	73
Slater	228	95	158	221	79	144	262	42
Springfield	202	190	253		142	285	129	215
St. Charles	24	253	284	226	212	144	355	124
St. Joseph	327	63		253	157	207	230	160
St. Louis		277	327	202	188	120	331	148
Trenton	286	114	72	304	208	155	281	123
Warrensburg	218	65	128	186	30	173	164	103
Webb City	326	160	223	124	107	290	8	220



**I**NFORMATION regarding various matters of interest in Missouri can not be properly classified in any of the preceding chapters. This information will be found in the pages of the present chapter. It relates to politics, laws, census statistics, history and other divisions which can best be gathered into a general chapter upon statistics and which will be supplementary to that which has been elsewhere presented.

The State contains 69,415 square miles of land surface or 45,425,600 acres of which 33,997,873 acres are included in farms and of this area 22,900,043 acres are included in improved lands. There were in 1900, 284,886 farms of an average size of 119.3 acres, which were valued, exclusive of buildings by the United States census at \$695,470,723. The buildings were valued at \$148,508,490, making a total value for farm lands and buildings of \$843,979,213. There are listed for taxes 41,830,793 acres, valued by the assessors at \$325,415,250, which is estimated to be only 40 per cent of the true value, which would make an actual value of \$813,538,125.

Square miles of land surface in Missouri, 68,431, or 43,795,840 acres; square miles of water surface, 706, or 451,840 acres. Total area, land and water, 69,137 square miles, or 44,247,686 acres. Ranks twentieth in size among the States and territories, including Alaska.

Estimates have been made for this volume as to the amount of taxes paid by different citizens of the State. From statistics secured from one-half the counties it is calculated that 37,670 persons pay over \$100 a year taxes, 204,511 pay between \$100 and \$20; and 403,755 pay less than \$20. If the first class is averaged at \$125, there is a revenue of \$4,708,750; from the second class, averaged at \$50, results \$10,225,550; from the third class averaged at \$15, results \$6,056,325; making a total revenue of \$20,990,525.

Missouri, a border State during the Civil War, was the scene of 244 battles of the 2261 engagements called battles, in which ten or more men were killed or wounded. The exact number of men in the Confederate service is not known, though it probably exceeded 50,000, but the State is credited with 109,111 men in

MISSOURI'S 1902 CROP			
	ACRES	PRODUCT	VALUE
Corn	7,746,211	314,093,985 *	\$ 99,727,295
Wheat	3,166,900	61,045,000 *	34,490,000
Oats	759,434	23,867,169 *	6,374,795
Hay	2,940,600	4,828,005 †	29,428,870
Forage	370,725	484,070 †	2,310,350
Flax	85,402	366,849 *	380,940
Rye	25,550	469,900 *	239,950
Buckwheat	2,500	40,000 *	24,000
Barley	1,820	45,500 *	15,835
Broom Corn	8,765	4,661,600 †	129,532
Clover Seed		58,737 *	394,698
Grass Seed		219,760 *	454,425
Cotton	67,658	23,918,840 †	1,788,960
Tobacco	4,361	3,356,460 †	324,040
Potatoes	93,915	11,510,451 *	3,470,435
Vegetables	114,863		5,153,958
Total			\$185,098,088
LIVE STOCK AND PRODUCTS			
KIND	NUMBER	VALUE	
Cattle	2,978,589	\$ 89,910,496	
Horses	967,037	62,415,660	
Mules	263,519	20,067,915	
Asses and Jennets	8,777	879,615	
Sheep	1,067,213	3,329,696	
Swine	4,534,664	45,216,760	
Chickens	14,908,601		
Turkeys	466,665	11,430,300	
Geese	428,307		
Ducks	278,140		
Swarms of Bees	205,110	615,930	
Honey	6,153,300 †	769,180	
Wool	4,145,137 †	690,855	
Milk	258,207,755 †	18,802,950	
Butter	45,509,110 †		
Eggs	85,203,230 †	10,650,410	
Total		\$264,799,147	
* Bushels.	† Pounds.	Dozen.	
† Tons.	\$ Gallons.		



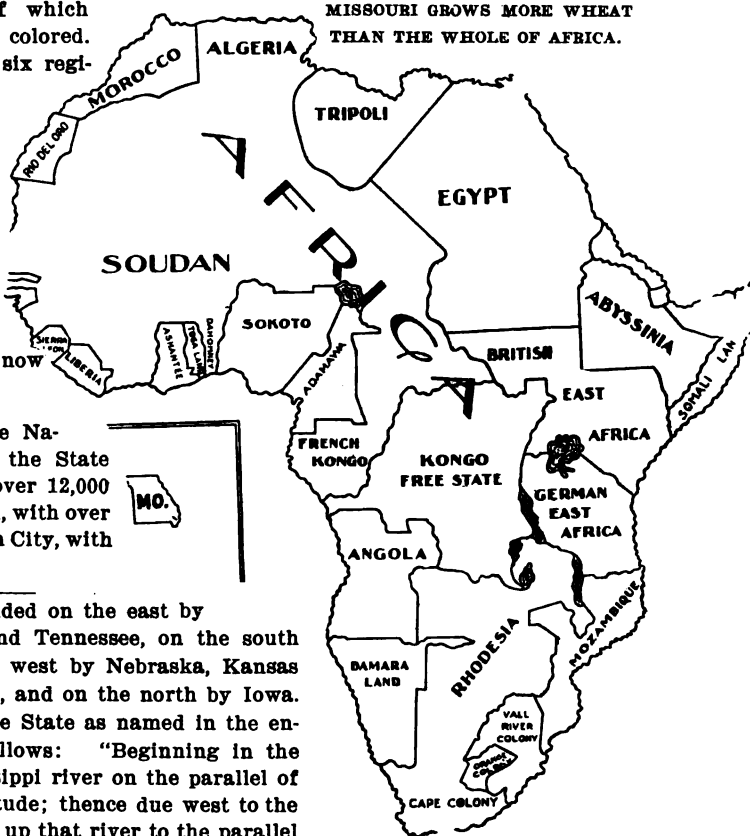
## THE STATE OF MISSOURI.

the Union army, of which number 8,344 were colored. The State furnished six regiments of infantry and one battery, over 8,000 men, for service in the Spanish war. The 6th regiment went to Cuba and the battery to Porto Rico. It sent 9,288 regular soldiers to the war with Mexico. Its National Guard now numbers 2,800.

There are three National cemeteries in the State—at St. Louis, with over 12,000 graves; at Springfield, with over 1,600, and at Jefferson City, with nearly 900.

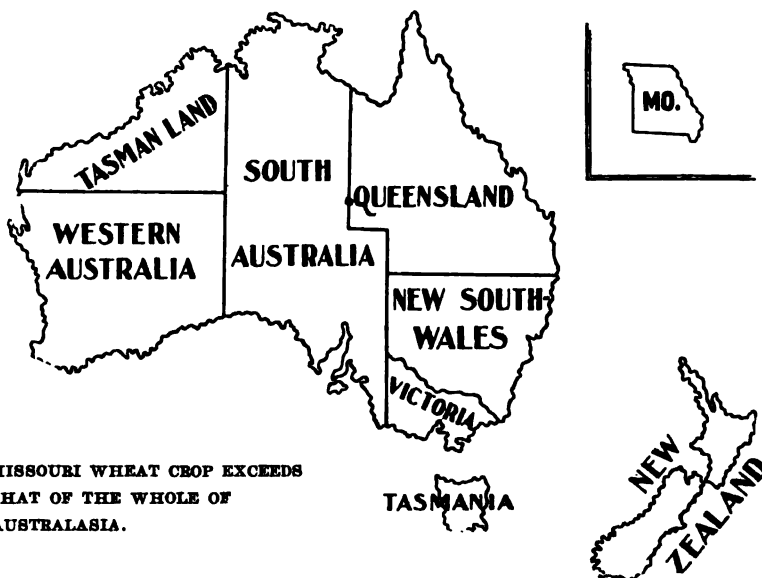
Missouri is bounded on the east by Illinois, Kentucky and Tennessee, on the south by Arkansas, on the west by Nebraska, Kansas and Indian Territory, and on the north by Iowa. The boundaries of the State as named in the enabling act are as follows: "Beginning in the middle of the Mississippi river on the parallel of 30 degrees north latitude; thence due west to the St. Francis river and up that river to the parallel 36 degrees 30 minutes north latitude; thence west to a point where the said parallel is intersected by a meridian line passing through the middle of the mouth of the Kansas river, where the same enters into the Missouri river; thence due north to the intersection of the parallel which passes through the rapids of the river Des Moines to the Mississippi and down the Mississippi to the place of beginning." The northern boundary line was long undecided, and in the dispute with Iowa military force was repeatedly

MISSOURI GROWS MORE WHEAT THAN THE WHOLE OF AFRICA.



National cemeteries.

Boundary lines.



MISSOURI WHEAT CROP EXCEEDS THAT OF THE WHOLE OF AUSTRALASIA.

threatened and once employed, and a Missouri sheriff was arrested and imprisoned; several acts of Congress were passed to ascertain the true boundary, and finally, in 1846, the whole matter was referred to the United States Supreme Court and settled. By an act of Congress, June 7, 1836, the State was extended on the west to the Missouri river, its present western limit.



WHERE THE BATTLE WAS FOUGHT, BOONVILLE. THE FIRST BATTLE OF MISSOURI DURING THE WAR BETWEEN THE STATES.

The population figures given in this volume are from the Federal census reports of 1900. In 1904 the Federal Census Bureau issued a census bulletin, based upon authenticated calculations, of the increase made since 1900 in the population of cities of over 10,000. The figures for Missouri are:

Joplin, population 1890, 9,943; 1900, 26,023; increase, 16,080; estimated for 1901, 27,631; for 1902, 29,239; for 1903, 30,847.

Kansas City, population 1890, 132,716; 1900, 163,752; increase, 31,036; estimated for 1901, 166,856; for 1902, 169,960; for 1903, 173,064.

St. Joseph, population 1890, 52,324; 1900, 102,979; increase, 50,655; estimated for 1901, 105,479; for 1902, 107,979; for 1903, 110,479.

St. Louis, population 1890, 451,770; 1900, 575,238; increase, 123,468; estimated for 1901, 587,585; for 1902, 599,932; for 1903, 612,279.

Sedalia, population 1890, 14,068; 1900, 15,231; increase, 1,163; estimated for 1901, 15,347; for 1902, 15,463; for 1903, 15,579.

Springfield, population 1890, 21,850; 1900, 23,267; increase, 1,417; estimated for 1901, 23,409; for 1902, 23,551; for 1903, 23,693.

Internal revenue paid in 1900 to the United States, \$16,694,171, in a grand total of \$295,316,107 by all the States, Missouri ranking eighth in the Union.

Number of Federal pensioners in State, 53,775; amount paid them in 1900, \$7,245,470; ranks sixth in the Union in number and payments. Total payments in all States, \$137,698,620, to 989,603 persons.

The State has cast its electoral vote for president and vice-president as follows:

1820—Monroe and Tompkins, 3; successful; republican. 1824—Clay and Jackson, 3; unsuccessful; republican. 1828—Jackson and Calhoun, 3; successful; democrat. 1832—Jackson and Van Buren, 4; successful; democrat. 1836—

Growth in population since 1900.

Internal revenue receipts.

Federal pensioners and pensions.

How Missouri's electoral vote has been cast.

Missouri's  
electoral vote.

Van Buren and Johnson, 4; successful; democrat. 1840—Van Buren and Johnson, 4; unsuccessful; democrat. 1844—Polk and Dallas, 7; successful; democrat. 1848—Cass and Butler, 7; unsuccessful; democrat. 1852—Pierce and King, 9; successful; democrat. 1856—Buchanan and Breckenridge, 9; successful; democrat. 1860—Douglas and Johnson, 9; unsuccessful; democrat. 1864—Lincoln and Johnson, 11; successful; republican. 1868—Grant and Colfax, 11; successful; republican. 1872—Hendricks and Brown, 6; unsuccessful; democrat. 1876—Tilden and Hendricks, 15; unsuccessful; democrat. 1880—Hancock and English, 15; unsuccessful; democrat. 1884—Cleveland and Hendricks, 16; successful; democrat. 1888—Cleveland and Thurman, 16; unsuccessful; democrat. 1892—Cleveland and Stevenson, 17; successful; democrat. 1896—Bryan and Sewall, 17; unsuccessful; democrat. 1900—Bryan and Stevenson, 17; unsuccessful; democrat.

SOME BUILDINGS OF  
DRURY COLLEGE, SPRINGFIELD.



Missouri governors.

The governors of Missouri have been: Territorial—Benj. Howard, 1812-16; William Clark, 1816-20. State—Alex. McNair, 1820-24; Frederick Bates, 1824-25; John Miller, 1825-32; Daniel Dunklin, 1832-6; Lilburn W. Boggs, 1836-40; Thomas Reynolds, 1840-4; John C. Edwards, 1844-8; Austin A. King, 1848-53; Sterling Price, 1853-57; Trusten Polk, 1857; Robert M. Stewart, 1857-61; Claiborne F. Jackson, 1861; Hamilton R. Gamble (provisional), 1861-4; Thomas C. Fletcher, 1864-8; James W. McClurg, 1868-71; B. Gratz Brown, 1871-3; Silas

Woodson, 1873-5; Charles H. Hardin, 1875-7; John S. Phelps, 1877-81; Thomas T. Crittenden, 1881-5; John S. Marmaduke, 1885-9; David R. Francis, 1889-93; William J. Stone, 1892-6; Lon V. Stephens, 1896-1900; Alexander M. Dockery, 1900-05. The salary is \$5,000 a year.



Taxes are assessed annually, and must be paid before December 31, under a penalty of one per cent until paid. Taxes and penalties are liens upon property assessed, and suits to enforce payment can be instituted in one year after becoming delinquent. The time of delinquency is on January

Assessment and collection of taxes.

1. The suit and sale of property for taxes follow as in ordinary course of law.

The following table shows the



COLUMBIA  
NORMAL ACADEMY.

CHILLICOTHE  
NORMAL SCHOOL.

SPRINGFIELD  
NORMAL COLLEGE.



population of the State at each census, together with rank among the States, density of square mile, slaves and per cent of increase each period:

	RANK	DENSITY	SLAVES	POPULATION	PER CENT
1900	5	45.20	.....	3,106,665	16.0
1890	5	38.98	.....	2,679,184	23.6
1880	5	31.55	.....	2,168,380	26.0
1870	5	25.04	.....	1,721,295	45.6
1860	8	17.20	114,931	1,182,012	73.3
1850	13	9.92	87,422	682,044	77.8
1840	16	5.58	58,240	383,702	173.2
1830	21	2.13	25,091	140,455	111.0
1820	23	1.01	10,222	66,557	219.3
1810	22	.32	3,011	20,845	.....

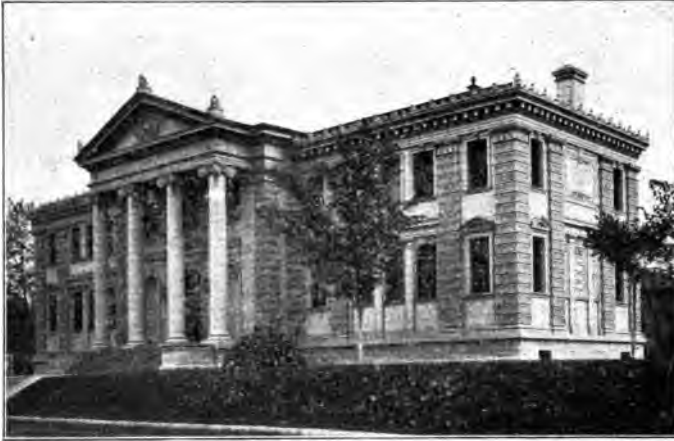
The population in 1900 was 149 times as large as it was in 1810, when the first census was taken. Of the 115 counties in the State, all but 20 showed an increase in 1900. Of the population, 65.1 per cent is rural, while 34.9 per cent is in the towns and cities.

Growth of population.

The State has 1,105,258 persons of school age,

Population divisions.

of whom 14,129 are foreign-born, 55,819 colored, and 554,448 male and 555,810 females. There are 662,928 persons of militia age, of whom 53,282 are foreign-born and 38,312 are colored. Of the 856,684 voters, 113,025 are foreign-born and 46,887



SEDALIA PUBLIC LIBRARY.

agreed on. An open account bears interest at 6 per cent per annum from the time when demand of payment is made.

There are 2,643 fourth-class postoffices in Missouri, and the average annual

are colored. Of the voting population, 7 per cent are illiterate.

The legal rate of interest is 6 per cent, but parties may contract in writing for any rate not exceeding 8 per cent. The penalty for usury is the forfeiture of the interest at ten per cent to the common schools and the recovery of costs by defendant. Judgments bear interest at 6 per cent per annum. If the contract sued on calls for a higher rate of interest (not exceeding 8 per cent) the judgment thereon may be made to bear the rate of interest so



CONCEPTION CONVENT.

salary of each fourth-class postmaster is \$179. The aggregate receipts during the year of the 2,813 postoffices in the State, including the large cities, were \$6,071,035 and the expense per capita of the postoffice system was \$1.86. There are 1,165 rural delivery routes.



CARTHAGE COLLEGIATE INSTITUTE.

Taking Jefferson City as the center of the State, according to the twelfth census of the United States:

The center of the area of farms in the United States in 1900 was 250 miles from the center of Missouri, or 150 miles east of the Mississippi river.

The center of farm values was 150 miles from the center of the State, or 50 miles east of the Mississippi.

The center of the total number of farms was 30 miles south by west of Jefferson City.

The center of oats production was 175 miles from the center of the State, or 50 miles north of its northern boundary.

The center of corn production was 125 miles from the center of the State, or just east of the Mississippi river.



MARYVILLE  
SEMINARY.

The center of wheat production was 225 miles from the center of the State, or 75 miles north of its northern boundary.

The center of improved farm acreage was 125 miles from the center of the State, or just east of the Mississippi river.

The center of the production of six leading cereals was 125 miles from the center of the State, just on its northeastern border.

Center of cereal  
production.

The center of gross farm income was 125 miles from the center of the State, or just east of the Mississippi river.



LINDENWOOD  
COLLEGE, ST. CHARLES.

CENTRAL FEMALE COLLEGE,  
LEXINGTON.



If each inhabitant of Missouri were allowed six square feet of ground, the population of the State, 3,106,665, could be placed upon one-third of a square mile, or 213 acres.

Density of  
population.

In Missouri the average size of farms is 119.3 acres.

In the United States 30.7 of the population live in towns of over 4,000. In Missouri 34.9 live in such towns. But outside of the three cities of St. Louis, Kansas City and St. Joseph, only 7.6 live in such towns.

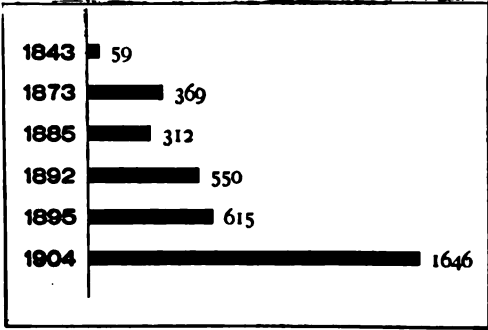
Missouri expends 12 cents a day for each pupil in her public schools.

The deaths per thousand in the United States each year from alcoholism are 2.8; in Missouri 2.4.

Bronchitis is more dangerous in other States than in Missouri. In the United States deaths per



CARSALL PLACE, CARTHAGE.



NUMBER OF STUDENTS IN STATE UNIVERSITY.

thousand population each year are 20.3, in Missouri, 16.5.

The highest priced honey on the market is made from Missouri white clover by Missouri bees.

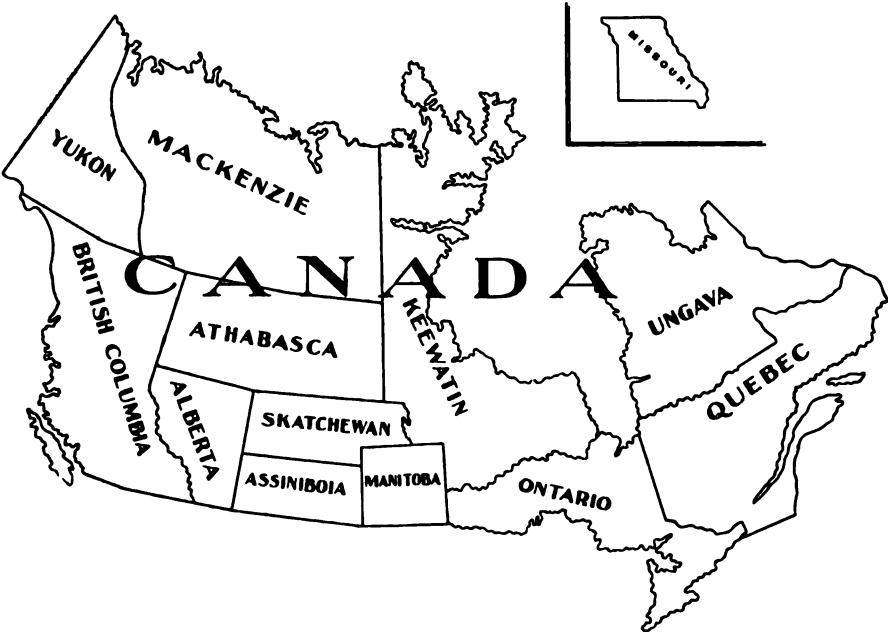
Missouri ranks first among the States in the production of sorghum.

PUBLIC HOLIDAYS: — The first day of January, the twenty-second day of February, the thirtieth day of May, the fourth day of July, the first

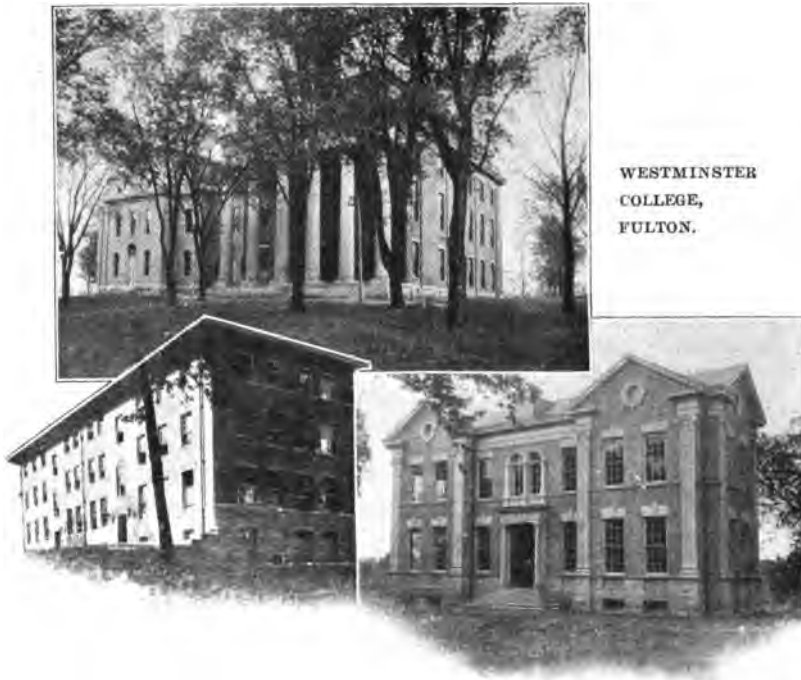
Monday in September, any general State election day, any Thanksgiving day appointed by the governor of this State or by the president of the United States, and the twenty-fifth day of December, are public holidays; and when any of such holidays fall upon Sundays, the Monday next following is considered such holiday. For all purposes whatsoever as regards the presentment for payment or acceptance, and of presenting and giving notice of the dishonor of bills of exchange, bonds, promissory notes or other mercantile paper, such holidays are treated and considered the same as the first day of the week, commonly called Sunday; and all bills of exchange, bonds, promissory notes, or other mercantile paper falling due on any such holiday or Sunday, are considered as falling due on the next succeeding day, unless such succeeding day be a holiday; in such case, it is considered as falling due the day previous.



TRIBUNE BUILDING, JEFFERSON CITY.



MISSOURI GROWS TWO-THIRDS AS MUCH WHEAT AS ALL CANADA.



WESTMINSTER  
COLLEGE,  
FULTON.

The Missouri weights and measures showing pounds in bushel, follow:

Wheat, beans, clover seed, Irish potatoes, peas and split peas..	60	Sweet potatoes .....	56	Missouri weights and measures.
Rye, shelled corn and flax seed..	56	Parsnips .....	44	
Unshelled corn .....	70	Common turnips .....	42	
Barley .....	48	Carrots .....	50	
Oats .....	32	Rutabagas .....	50	
Bran .....	20	Cornmeal and millet.....	50	
Onions .....	57	Green peas, unshelled.....	56	
Dried peaches .....	33	Green beans, unshelled.....	56	
Dried apples .....	24	Apples, peaches, pears and Hungarian grass seed .....	48	
Buckwheat .....	52	Malt .....	38	
Hemp seed .....	44	Top onion sets .....	28	
Blue-grass seed .....	14	Red-top seed and orchard grass seed .....	14	
Timothy seed .....	45	Sorghum seed .....	42	
Castor beans .....	46	Osage orange seed .....	36	
Cotton seed .....	33	Cucumbers .....	48	
Salt .....	50	Tomatoes .....	45	
Mineral coal .....	80			
Coke and charcoal(cubic inches)	2680			

Terms of office of county officers—Presiding judge county court, term 4 years, elected 1902; county court judges, term 2 years, elected 1902; probate judge, term 4 years, elected 1902; clerk circuit court, term 4 years, elected 1902; recorder of deeds, term 4 years, elected 1902; clerk county court, term 4 years, elected 1902; prosecuting attorney, term 2 years, elected 1902; sheriff, term 2 years, elected 1902; collector, term 2 years, elected 1902; assessor, term 4 years, elected 1902; treasurer, term 2 years, elected 1902; coroner, term 2 years, elected 1902; public administrator, term 4 years, elected 1900; surveyor, term 4 years, elected 1900; school commissioner, term 2 years, elected April, 1902.

Terms of office of  
county officers.





HARDIN COLLEGE, MEXICO.

Missouri's expenditure for charity.

For charity, Missouri gives \$3,000,000 annually. The work is divided about equally, in extent of financial devotion, between public and private institutions. Maintained at the expense of taxpayers are four State hospitals for insane, located respectively at Fulton, St. Joseph, Nevada, and Farmington; Colony for the Feeble Minded and Epileptic, at Marshall; School for Blind, at St. Louis; School for Deaf and Dumb, at Fulton; State Industrial Training School for Boys, at Boonville; State Industrial School for Girls, at Chillicothe; Federal Soldiers' Home, at St. James, and the Confederate Home, at Higginsville. There are 96 county infirmaries. City hospitals for the sick are maintained in St. Louis, Kansas City, and St. Joseph, and the first named has a city insane asylum and poor house. The official charity appropriations amount to \$1,463,000, and private charity is estimated at \$1,500,000. For one year the expenditures for public charity are:

Four State Hospitals, Insane..	\$536,493	City Hospitals for Sick, St. Louis, Kansas City and St. Joseph .....	100,000
Colony for Feeble Minded and Epileptic: for support.....	33,665	St. Louis Insane Asylum.....	150,000
Special .....	51,214	St. Louis Poor House (chronic insane) .....	100,000
State School for Blind.....	30,000	Ninety-six county Poor houses.	163,000
State School for Deaf.....	75,000	Outdoor relief in 114 counties..	136,000
State Reform School for Boys..	45,000		
State Industrial School for Girls, for support .....	12,300		
Special .....	12,000	Total for city and county charities .....	\$649,000
Federal Soldiers' Home.....	11,000		
Confederate Soldiers' Home...	8,000		
Total for State Institutions...	\$814,672		

The private charity estimated, is:  
**In St. Louis, 120 private institutions** .....\$600,000  
**Three general relief associations, St. Louis (Provident Association, Catholic and Jewish)** ..... 100,000  
**For the rest of the State, private institutions** ..... 600,000

Private Relief Associations....	100,000	
Private individuals .....	100,000	Private charities.
<hr/>		
Total private charities.....	\$1,500,000	
Total official charities.....	1,463,000	
Total for charities in Missouri, annually .....	\$2,963,000	

Congressional districts number sixteen, thus divided:

First.—The counties of Adair, Clark, Knox, Lewis, Macon, Marion, Putnam, Schuyler, Scotland and Shelby. Population 1900, 183,590.

Second.—The counties of Chariton, Carroll, Grundy, Linn, Livingston, Monroe, Randolph and Sullivan. Population 1900, 183,358.

Third.—The counties of Caldwell, Clay, Clinton, DeKalb, Daviess, Gentry, Harrison, Mercer, Ray, and Worth. Population 1900, 182,960.

Fourth.—The counties of Andrew, Atchison, Buchanan, Holt, Nodaway and Platte. Population 1900, 221,885.

Fifth.—The county of Jackson. Population 1900, 195,193.

SPRINGFIELD  
HIGH SCHOOL.



CARUTHERSVILLE  
HIGH  
SCHOOL.



JOPLIN  
HIGH  
SCHOOL.



KIRKSVILLE HIGH SCHOOL.

Sixth.—The counties of Bates, Cass, Cedar, Dade, Henry, Johnson and St. Clair. Population 1900, 162,620.

Seventh.—The counties of Benton, Greene, Hickory, Howard, Lafayette, Pettis, Polk and Saline. Population 1900, 218,666.

Eighth.—Counties of Boone, Camden, Cole, Cooper, Miller, Moniteau, Morgan, and Osage. Population 1900, 142,254.

Congressional districts.

WILLIAM  
WOODS  
COLLEGE,  
FULTON.



SYNODICAL  
COLLEGE,  
FULTON.

Ninth.—The counties of Audrain, Callaway, Franklin, Gasconade, Lincoln, Montgomery, Pike, Ralls, St. Charles, and Warren. Population 1900, 197,370.

Tenth.—County of St. Louis, and all that portion of the city of St. Louis included in the following wards and part of ward, to-wit: The first, seventh, eighth, ninth, tenth, eleventh, twelfth, nineteenth, twenty-fourth and twenty-eighth wards, and precinct eleven of the twenty-seventh ward, as said wards and precincts are now constituted. Population 1900, 290,187.

Eleventh.—All that portion of the city of St. Louis included in the following wards and part of ward, to-wit: The second, third, sixteenth, seventeenth, eighteenth, twentieth, twenty-first and twenty-sixth

SOME BUILDINGS OF  
MISSOURI VALLEY  
COLLEGE, MARSHALL.



wards, and precincts one, two, three, four, five, six, seven, eight, nine, and ten of the twenty-seventh ward, as said wards and precincts are now constituted. Population 1900, 182,667.

Missouri congressional districts.

**Twelfth.**—All that portion of the city of St. Louis included in the following wards, to-wit: The fourth, fifth, six, thirteenth, fourteenth, fifteenth, twenty-second, twenty-third and twenty-fifth wards, as said wards are now constituted. Population 1900, 152,424.

**Thirteenth.**—The counties of Carter, Iron, Jefferson, Reynolds, Madison, Perry, St. Francois, Ste. Genevieve, Washington, Wayne and Bollinger. Population 1900, 153,036.

**Fourteenth.**—The counties of Butler, Cape Girardeau, Christian, Douglas, Dunklin, Howell, Mississippi, New Madrid, Oregon, Ozark, Pemiscot, Ripley, Scott, Stoddard, Stone and Taney. Population 1900, 250,614.

**Fifteenth.**—The counties of Barry, Barton, Jasper, Lawrence, McDonald, Newton, and Vernon. Population 1900, 231,659. Missouri congressional districts.

**Sixteenth.**—The counties of Crawford, Dallas, Dent, Laclede, Maries, Phelps, Pulaski, Texas, Webster, Wright and Shannon. Population 1900, 158,173.

There are thirty-four senatorial districts in Missouri, as follows:

**First.**—The counties of Atchison, Gentry, Nodaway, and Worth. Population 1900, 79,825.

**Second.**—The county of Buchanan. Population 1900, 121,838.

**Third.**—The counties of Andrew, Clay, Clinton, DeKalb, Holt and Platte. Population 1900, 101,292.

**Fourth.**—The counties of Grundy, Harrison, Livingston, Mercer, and Putnam. Population 1900, 95,926.

**Fifth and Seventh.**—The county of Jackson. Population 1900, 195,193. Missouri senatorial districts.

**Sixth.**—The counties of Chariton, Linn and Sullivan. Population 1900, 72,611.

**Eighth.**—The counties of Caldwell, Carroll, Daviess, and Ray. Population 1900, 89,241.

**Ninth.**—The counties of Adair, Macon and Shelby. Population 1900, 70,913.

**Tenth.**—The counties of Boone, Callaway, Montgomery, St. Charles and Warren. Population 1900, 105,590.

**Eleventh.**—The counties of Audrain, Lincoln and Pike. Population 1900, 65,256.

**Twelfth.**—The counties of Clark, Knox, Lewis, Scotland and Schuyler. Population 1900, 69,658.

**Thirteenth.**—The counties of Marion, Monroe, Ralls and Randolph. Population 1900, 82,776.

**Fourteenth.**—The counties of Camden, Cooper, Howard, Moniteau and Morgan. Population 1900, 82,088.

**Fifteenth.**—The counties of Benton, Hickory, Pettis and Saline. Population 1900, 92,682.



STEPHENS FEMALE COLLEGE, COLUMBIA.



KEMPER SCHOOL, BOONVILLE, T. A. JOHNSTON.



ON A REPRESENTATIVE MISSOURI FARM.

Sixteenth.—The counties of Bates, Cedar, Henry, and St. Clair. Population 1900, 93,025.

Seventeenth.—The counties of Cass, Johnson and Lafayette. Population 1900, 83,158.

Eighteenth.—The counties of Barry, Lawrence, McDonald and Newton. Population 1900, 97,769.

Nineteenth.—The counties of Christian, Dallas, Douglas, Ozark, Polk, Stone, Taney and Webster. Population 1900, 119,703.

Twentieth.—The counties of Barton, Dade, Greene and Vernon. Population 1900, 120,710.

Twenty-first.—The counties of Bollinger, Butler, Cape Girardeau, Carter, Dunklin, Ripley, and Wayne. Population 1900, 112,641.

Twenty-second.—The counties of Howell, Oregon, Shannon, Texas and Wright. Population 1900, 86,698.

Twenty-third.—The counties of Mississippi, New Madrid, Pemiscot, Scott and Stoddard. Population 1900, 72,993.

Twenty-fourth.—The counties of Crawford, Dent, Iron, Phelps, Reynolds and Washington. Population 1900, 71,275.

Twenty-fifth.—The counties of Franklin, Gasconade, and St. Louis. Population 1900, 92,919.

Twenty-sixth.—The counties of Jefferson, Madison, Perry, St. Francois and Ste. Genevieve. Population 1900, 85,231.

Twenty-seventh.—The counties of Cole, Laclede, Maries, Miller, Osage and Pulaski. Population 1900, 86,394.

Twenty-eighth.—The county of Jasper. Population 1900, 84,018.

The senatorial districts in St. Louis City are:

Twenty-ninth.—Comprises wards 9, 10, 11 and 24, and precincts 10 and 11 in ward 8; precincts 10 and 13 in ward 12; precincts 12 and 13 in ward 23; precincts 1 and 2 in ward 25, and precinct 1 in ward 28. Population 1900, 113,884.

Thirtieth.—Comprises wards 7 and 13, and precincts 9, 10 and 11 in ward 6; precincts 1, 2, 3, 4, 5, 6, 7, 8 and 9 in ward 8; precincts 1, 2, 3, 4, 5, 6, 7, 8, 9, 11 and 12 in ward 12; and precincts 1, 2, 3, 5, 6, 7, 8, 9, 10 and 11 in ward 23. Population 1900, 97,743.

Missouri Senatorial  
districts.



SOME REPRESENTATIVE  
MISSOURI SCHOOL BUILDINGS.

cincts 1, 2, 3, 4, 5 and 6 in ward 16; and precincts 1, 2, 3, 4, 5, 6, 7, 8 and 9 in ward 17. Population 1900, 86,809.

Thirty-fourth. — Comprises wards 1, 19, 26 and 27 and precinct 12 in ward 2; precincts 10 and 11 in ward 17; precinct 7 in ward 21; precincts 3, 4, 8, 9, 10, 11, 12 and 13 in ward 25; and precincts 2, 3, 4, 5, 6, 7, 8, 9, 10, 11 and 12 in ward 28. Population 1900, 135,177.



Thirty-first. — Comprises wards 4, 5 and 14, and precinct 10 in ward 3; precincts 1, 2, 3, 4, 5, 6, 7, 8, 12 and 13 in ward 6; and precincts 1, 2, 3, 5, 6 and 7 in ward 15. Population 1900, 65,691.

Thirty-second. — Comprises wards 20 and 22, and precincts 8, 9, 10 and 11 in ward 15; precincts 7, 8, 9, 10, 11, 12 and 13 in ward 16; precincts 1, 2, 3, 4, 5, 6, 8, 9, 10 and 11 in ward 21; precinct 4 in ward 23; and precincts 5, 6 and 7 in ward 25. Population 1900, 75,934.

Thirty-third. — Comprises ward 18 and precincts 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11 and 13 in ward 2; precincts 1, 2, 3, 4, 5, 6, 7, 8, 9, 11 and 12 in ward 3; precinct 4 in ward 15; pre-

Missouri senatorial  
districts.

The State representative districts are:

The House of Representatives consists of one hundred and forty-two members, divided among the several counties of the State and the city of St. Louis, as follows: The county of Buchanan, four; Greene, two; Jackson, six; Jasper, three; St. Louis, two; and St. Louis city, sixteen; and each of the other counties of the State, one.

Missouri representa-  
tive districts.

The judicial circuits are as follows:

First.—Clark, Scotland, Knox and Lewis. Population 1900, 58,818.

Second.—Schuyler, Adair, Macon and Shelby. Population 1900, 81,753.

Third.—Mercer, Harrison, Putnam and Grundy. Population 1900, 73,624.

Judicial circuits.

CHURCH AND  
GYMNASIUMEISENMAYER HALL  
(BOYS' DORMITORY).COLLEGE  
BUILDING.KESSLER  
HALL.CENTRAL WESLEYAN COLLEGE AND LADIES' HOME.  
ORPHANS' HOME, WARRENTON.Judicial circuits in  
Missouri.

- Fourth.—Gentry, Nodaway, Atchison, Worth and Holt. Population 1900, 96,908.
- Fifth.—Andrew, DeKalb, Clinton and Platte. Population 1900, 65,306.
- Sixth.—Buchanan. Population 1900, 121,838.
- Seventh.—Daviness, Caldwell, Ray, Clay and Livingston. Population 1900, 103,991.
- Eighth.—City of St. Louis. Population 1900, 575,238.
- Ninth.—Randolph, Howard, Boone and Callaway. Population 1900, 97,405.
- Tenth.—Monroe, Marion, Ralls and Pike. Population 1900, 84,078.
- Eleventh.—Audrain, Montgomery, Lincoln, Warren, and St. Charles. Population 1900, 90,476.
- Twelfth.—Sullivan, Linn, Chariton and Carroll. Population 1900, 99,066.
- Thirteenth.—St. Louis, Franklin, Gasconade and Osage. Population 1900, 107,015.
- Fourteenth.—Cole, Maries, Miller, Morgan, Moniteau and Cooper. Population 1900, 96,019.
- Fifteenth.—Saline and Lafayette. Population 1900, 65,382.
- Sixteenth.—Jackson. Population 1900, 195,193.
- Seventeenth.—Cass and Johnson. Population 1900, 51,479.
- Eighteenth.—Camden, Hickory, Polk, Dallas, Webster and Wright. Population 1900, 94,415.
- Nineteenth.—Crawford, Phelps, Pulaski, Laclede, Texas and Dent. Population 1900, 89,248.
- Twentieth.—Shannon, Oregon, Howell and Carter. Population 1900, 53,693.
- Twenty-first.—Jefferson, Washington, Iron, Reynolds and Wayne. Population 1900, 72,161.
- Twenty-second.—Ripley, Butler, Stoddard and Dunklin. Population 1900, 76,330.
- Twenty-third.—Greene. Population 1900, 52,713.
- Twenty-fourth.—Lawrence, Newton, McDonald and Barry. Population 1900, 97,769.



ST. FRANCIS  
ORPHANS'  
HOME,  
NEVADA.

SISTERS'  
CONVENT,  
MOBERLY.

Twenty-fifth.—Jasper. Population 1900, 84,018.

Twenty-sixth. — Vernon, Barton, Cedar, and Dade. Population 1900, 84,920.

Twenty-seventh. — Ste. Genevieve, Perry, St. Francois, Madison and Bollinger. Population 1900, 74,169.

Twenty-eighth. — Cape Girardeau, Scott, Mississippi, New Madrid and Pemiscot. Population 1900, 72,639.

Twenty-ninth.—Bates, Benton, Henry and St. Clair. Population 1900, 92,658.

Thirtieth.—Pettis. Population 1900, 32,438.

Thirty-first.—Christian, Douglas, Ozark, Stone and Taney. Population 1900, 65,905.



PRITCHETT COLLEGE AND OBSERVATORY,  
GLASGOW.

Col. Wm. F. Switzler in a newspaper article gives this account of the organization and naming of Missouri counties:

**Adair:** Organized January 29, 1841. Called after General John Adair, of Mercer county, Kentucky, who was elected governor of that State in 1820 and died May 19, 1840.

**Andrew:** Organized January 29, 1841. Called in honor of Andrew Jackson Davis, once a prominent citizen of St. Louis, formerly of Savannah, Missouri.

**Atchison:** Organized February 14, 1845. Called in honor of David R. Atchison, United States Senator, 1843-1854, who died January 26, 1886.

**Audrain:** Organized December 17, 1836. Called for James S. Audrain, who was a representative from St. Charles in the Missouri legislature in 1830, and who died in St. Charles, November 10, 1831.

**Barry:** Organized January 5, 1835. Called in honor of Wm. T. Barry, of Kentucky, a member of Jackson's cabinet as postmaster-general, 1829-35, the first as such appointed to that office. Died August 30, 1835, in Liverpool, while minister to Spain.

**Barton:** Organized December 12, 1855. Called for David Barton, president of the constitutional convention of 1820, and United States Senator 1820-1831.

Missouri counties—  
when organized  
and for  
whom named—  
Adair to Barton.



Died in Boonville, September 28, 1837. The first monument (manufactured of limestone) erected at his grave was moved to Columbia in 1899 and now stands on the University campus near that of Jefferson.

SOME BUILDINGS OF  
WILLIAM JEWELL  
COLLEGE, LIBERTY.



**Bates:** Organized January 29, 1841. Called for Frederick Bates, second governor of the State, who died August 4, 1825, before the expiration of his term. Lieutenant-Governor W. H. Ashley, having resigned, Abraham J. Williams, of Columbia, president of the Senate, became governor until the special election in September, same year, when John Miller was elected. Williams died December 30, 1839, and an old fashioned box-shaped limestone monument marks his grave in Columbia cemetery.

**Benton:** Organized January 3, 1835. Called for Thomas H. Benton, United States Senator, 1820-1850. Died April 10, 1858.

**Bollinger:** Organized March 1, 1851. Called in honor of Maj. George E. Bollinger, an early settler and State Senator.

**Boone:** Organized November 16, 1820. Named for the old pioneer and Indian fighter, Daniel Boone. Died in St. Charles county September 26, 1820.

**Buchanan:** Organized February 10, 1839. Called for James Buchanan, president. Died June 1, 1868. As Mr. Buchanan was not elected to the presidency till 1856 and had not in 1839 attained his greatest eminence, the accuracy of this statement has been questioned. On page 123, House Journal, December 13, 1838, the House had under consideration a bill to organize the counties of Platte and DeKalb, when John P. Morris, of Howard, moved to strike out the word "DeKalb" and insert "Buchanan," the Journal adding "in honor of Hon. James Buchanan, of Pennsylvania." Mr. Morris' motion prevailed 46 to 39.

**Butler:** Organized February 27, 1849. Called for Benjamin F. Butler, attorney-general during Jackson's second term, 1833-1837. Died in Paris, October, 1858.



GREAT WESTERN COLLEGE, WEBB CITY.

Names and  
organization of  
Missouri  
counties—Bates  
to Butler.

**Caldwell:** Organized December 26, 1836. Called for Capt. Matthew Caldwell, commander of Indian scouts and a hunter of Kentucky; Joseph Doniphan, father of Gen. A. W. Doniphan, belonged to his company. Gen. Doniphan was chiefly instrumental in having the county named in honor of his father's old comrade.

**Callaway:** Organized November 25, 1820. Called for Capt. James Callaway, who was killed by Indians on a branch of the Loutre, March 7, 1815.

**Camden:** First named Kinderhook, the residence of Martin Van Buren, and organized January 29, 1841. On February 23, 1843, name changed to Camden, in honor of Charles Pratt Camden, an English statesman who was a warm advocate of the American colonies.

**Cape Girardeau:** One of the four districts into which Missouri was divided in 1804. On October 1, 1812, was organized into a county by proclamation of Gov. Wm. Clark; was reduced to its present limits March 5, 1849. The name Cape Girardeau is supposed to be derived from that of Ensign Slewe Girardah, who from 1704 to 1720 was stationed with the royal troops of France at Kaskaskia, and after resigning his position in the army became a successful trader with the Indians in the territory now occupied by the county.

**Carroll:** Organized January 3, 1833. Called for Charles Carroll, of Carrollton, one of the signers of the Declaration of Independence. Died November 14, 1832.

**Carter:** Organized March 10, 1859. Called for Zimri Carter, a pioneer citizen.

**Cass:** Organized September 14, 1835. First called Van Buren; changed to Cass February 19, 1849, in honor of Lewis Cass, United States Senator from Michigan. Died June 17, 1866.

**Cedar:** Organized February 14, 1845. Called Cedar after the principal stream in the county on the bluffs of which cedar trees abound.

**Charlton:** Organized November 16, 1820. John Chariton was the name of a leader of the French fur traders who at an early day located on the Missouri river at the mouth of the creek which was ever afterwards called Charlton. Hence the name of the creek and county.

**Christian:** Organized March 8, 1860. Named in honor of Col. Wm. Christian, of Christian county, Kentucky. Killed by Indians in April, 1786.

**Clark:** Organized December 15, 1818, and reorganized December 16, 1836. Named for William Clark, first governor of Missouri territory and a party to the expedition 1805-6 of Lewis and Clark to the headwaters of the Missouri. Died September 1, 1838.

Names and organization of Missouri counties—Caldwell to Clark



ALMEDA MARSHALL—W. P. HARNED, COOPER COUNTY.

Clay: Organized January 2, 1822. Called for Henry Clay, of Kentucky. Died June 29, 1852.

Clinton: Organized January 15, 1833. Called for Governor DeWitt Clinton, of New York. Died February 11, 1828.



HORSE BARN,  
JOHN H.  
PARKER,  
NEAR  
UNIONVILLE.



RESIDENCE OF  
B. H. BONFOEY,  
UNIONVILLE.



RESIDENCE OF JOHN H. CARROLL, UNIONVILLE.

Cole: Organized November 16, 1820. Called for Captain Stephen Cole, an old settler, who built "Cole's Fort," near Boonville.

Cooper: Organized December 17, 1818. Called for Sarshel Cooper, who was killed by an Indian in Cooper's Fort opposite Arrow Rock and near the present village of Boonsboro, Howard county, on the night of April 14, 1814. One wall of Cooper's log cabin formed a part of the wall of the Fort. The Indian stealthily, in a rain or snow storm, removed a part of the chinking and through the opening shot Cooper while sitting by the fire with a child on his lap. The child was uninjured. Mr. Cooper was the grandfather of former State Senator Col. Stephen Cooper, who now resides in Howard county.

Crawford: Organized January 23, 1829. Called for Wm. H. Crawford, a distinguished Democratic statesman of Georgia, who died in 1834.

Dade: Organized January 29, 1841. Called for Major Dade, of the Seminole war, and a resident of the county.

Dallas: Organized December 10, 1844. First named Niangua in 1842; changed to Dallas December 10, 1844, in honor of George M. Dallas, candidate for vice-president in 1844 with James K. Polk and

United States Senator from Pennsylvania. Died December 31, 1864.

Daviss: Organized December 29, 1836. Called for Colonel Joe Hamilton Daviss, of Kentucky. Killed in the battle of Tippecanoe, November 7, 1811.

De Kalb: Organized February 25, 1845. Called for Baron John De Kalb, a Frenchman of Revolutionary fame, who was killed in the battle of Camden in 1780.

Dent: Organized February 10, 1851. Called for Lewis Dent, an early settler.

Douglas: Organized October 19, 1857. Called for Stephen A. Douglas, of Illinois. Died June 3, 1861.

Dunklin: Organized February 14, 1845. Called for Daniel Dunklin, governor of Missouri from 1832 to 1836. Died August 25, 1844.

Franklin: Organized December 11, 1818. Called for Benjamin Franklin, printer and philosopher. Died April 17, 1790.

Gasconade: Organized November 25, 1820. Named after its principal stream, the Gasconade river, which was so called by the French settlers, after Gascon, inhabitant of Gascony in France, who was distinguished for bragging and bluster. The waters of the river are boisterous or boastful. Hence the name and hence our English word "gasconade."

Names and  
organization of  
Missouri  
counties—Clay  
to Gasconade.

**Gentry:** Organized February 12, 1841. Called for General Richard Gentry, of Columbia, who was killed in the battle of Okeechobee, Florida, December 25, 1837.

**Greene:** Organized January 2, 1833. Called for General Nathaniel Greene, of the Revolution. Died, 1786.

**Grundy:** Organized January 2, 1843. Called for Felix Grundy, United States Senator of Tennessee. Died December 19, 1840.

**Harrison:** Organized February 14, 1845. Called for Albert G. Harrison, of Fulton, Missouri, member of congress from 1835 to 1839. Died September 7, 1839.

**Henry:** First named Rives in honor of Wm. C. Rives, of Virginia. Organized December 13, 1834. Changed to Henry in honor of Patrick Henry, who died June 6, 1799.

**Hickory:** Organized February 14, 1845. Named in honor of General Jackson, who was known as "Old Hickory;" residence called "Hermitage," which is the name of the county seat.

**Holt:** Organized February 15, 1841. Named for Dr. David Rice Holt, of Platte, who died a representative, December 7, 1840.

**Howard:** Organized January 20, 1816. Named for General and Governor Benjamin Howard, Lexington, Kentucky. Died in St. Louis, September 18, 1814. Howard was governor of Upper Louisiana which became Missouri Territory,

Names and  
organization of  
Missouri  
counties—  
Gentry to Jasper.



DAIRY SCENE, JEFFERSON COUNTY—BONNE TERRE FARMING AND  
CATTLE COMPANY, HERCULANEUM.

June 4, 1812, during his administration, and hence was for a short time the first governor of the Territory of Missouri. Howard county at its organization comprised a territory of 23,000 square miles, extending from the Osage river on the east and south to the Iowa line on the north, and was called "The mother of counties."

**Howell:** Organized March 2, 1857. Received its name from Howell Valley, in which the first settlement was made by a Mr. Howell in 1838 and in which West Plains, the county seat, is located.

**Iron:** Organized February 17, 1857. Named in honor of its great iron mines.

**Jackson:** Organized December 15, 1826. Named in honor of Andrew Jackson. Died June 8, 1845.

**Jasper:** Organized January 29, 1841. Named for Sergeant Jasper, of the Revolution.

# Missouri Gazette.

VOL. I.

TUESDAY, JULY 2, 1820.

No. 4.

ST. LOUIS, LOUISIANA.  
 PUBLISHED BY JAMES CHAPMAN,  
 Printer to the Territory.

Terms of Subscription for the  
 MISSOURI GAZETTE.  
 Three Dollars paid by advance.

Advertisements not exceeding a  
 year, will be inserted one week for  
 one dollar, and fifty cents for every  
 subsequent week, those of a greater length  
 as per contract.

Advertisements sent to this Office  
 without specifying the time they are  
 to be inserted, will be continued until  
 ordered, and charged accordingly.

## Sales at Auction.

### I WILL SELL

TO the highest bidder for Cash,  
 on Tuesday the 2nd of August next,  
 at 10 o'clock A. M. at the house  
 of Mrs. Labady, in the Town of  
 St. Louis, an Assortment of goods  
 consisting of between 7 and 800  
 Slaves, 2 or 3 Best Canebrake  
 Mills, and from more than three  
 cars in Cedar at this town. Dry  
 goods, consisting of Cloths,  
 broads, Chinos, Calicoes, Mus-  
 lins, Irish Linen, Saddlery,  
 leather Ties, &c. &c. And  
 large quantity of well assorted  
 notions and Hardware.

As the sole object of the sale is  
 to raise the aforesaid sum of mo-  
 ney, the goods must be sold, fetch  
 what they will; therefore great  
 bargains will be given.

John Connor, Auctioneer.  
 St. Louis, July 2nd, 1820.

## CASH

GIVEN for Bills of Exchange  
 on the Government.

WILKINSON & PRICE.  
 St. Louis, July 12, 1820.

School Books

FOR SALE.

A VARIETY OF

School Books,

FOR SALE.

at this Office.

## For the Missouri Gazette.

### Patriotic Effusions.

A considerable number of the  
 inhabitants of this Territory, met  
 to celebrate the day of American  
 Independence; the greater num-  
 ber of which were the natives of  
 this country; they assembled at  
 a convenient house, near the cen-  
 ter of the village.

Col. Timothy Kilday, President.  
 Francis Souder, Esq. Vice-  
 President.

The solemnities of the day  
 were ushered on, after the fol-  
 lowing Speech was delivered,  
 by John O. Heath, Esq.

### Fellow Citizens.

The memorable day which is  
 the occasion of our meeting upon  
 this, was no doubt the most me-  
 morable ever recorded in the  
 pages of ancient or modern his-  
 tory; we have met to celebrate  
 a day in commemoration of the  
 Independence of the United States  
 of America; a day on which the  
 goddess of liberty waved in the  
 air with hilarity, the glorious  
 banner of liberty, the workman-  
 ship of the gods; a day on which  
 the fair daughters of America  
 rejoiced with gladdened hearts,  
 in concert with their protecting  
 patriotic heroes; a day in which  
 Great Britain was seen in sack  
 cloth and mourning; a day the  
 name of which alone pallies the  
 highest mirth. Fellow Citizens,  
 as this is a day memorial amongst  
 the most memorable events; a  
 day held sacred by every citizen  
 of America, either by birth or  
 adoption; it behoves, it de-  
 serves not only to consider that  
 respect due to the day; but to  
 consider it as citizens of the  
 most enlightened government  
 that ever existed since the crea-  
 tion of man, and whilst we have  
 met to celebrate the day of our  
 independence and liberty; let  
 us relatively consider our floun-  
 ding upon that broad basis of li-  
 berty, which was laid by the  
 industry, perseverance, blood and  
 lives of our patriotic ancestors,  
 whose birthrights have descend-  
 ed to us; yet if we should find  
 that we do not yet enjoy that  
 equal distribution of privilege &  
 right, which every American  
 citizen is entitled to, let us fur-  
 ther consider our national stand-  
 ing respecting foreign affairs; let  
 foreign concerns be first adjusted  
 before we petition for our un-

questionable rights and privi-  
 leges, which as yet lay hidden un-  
 der the dead leaves of the great  
 tree; true it is we are far distant  
 from the source, and in a man-  
 ner secluded from political infor-  
 mation; yet there can be no rea-  
 sonable doubt, but we feel as  
 zealous for our country and wel-  
 fare of our fellow-citizens, as the  
 most ostentatious patriot or po-  
 litician within the United States.

In America the object of the  
 citizen is to secure their rights  
 and privileges as an independent  
 free people; when they have this  
 secured, they have reached the  
 apex of a Republican Govern-  
 ment; Fellow Citizens of Louisi-  
 ana, such an acquisition will  
 be in our power, but it must be

a work of time, harmony and a  
 friendly communication of our  
 concern, is a necessary trait in  
 the character of American citi-  
 zens which we assume; was it  
 not by the fidelities of friend-  
 ship and fraternal aid, that our  
 worthies were able to achieve  
 the great work of liberty, at a  
 time when we were noticed only  
 as an infant growling upon the  
 breast of an unnatural, tyrannical  
 and oppressive motives? But  
 fellow citizens let the great ex-  
 ample of our heroes, that are  
 gone, and those that still exist to  
 breathe the pure air of peace and  
 liberty, the polar star for our  
 guide; whilst we stand united  
 we are invulnerable to every na-  
 tion abroad, and secure at home  
 under a free Republican Govern-  
 ment. Our independence,  
 liberty and our safety are found-  
 ed on our constitution, a work  
 of the unprejudiced wisdom of our  
 political sages, and which 'tis  
 our indispensible duty to sup-  
 port; its also our indispensible  
 duty to support with dignity, the  
 small branch of the great tree of  
 liberty, which we have the hon-  
 or to bear in Louisiana; and  
 altho' we are not among the  
 choicest flowers; let it be recol-  
 lected, fellow citizens, that the  
 leaves are green about us; let  
 the names of our immortal he-  
 roes be ever sacred in our lips;  
 let us with heart felt gratitude  
 declare their worth, and infants  
 be taught to chant their praise.  
 Let harmony and peace reign a-  
 mong us, that no jarring may  
 arise between the ancient and  
 worthy inhabitants of the terri-  
 tory and her late emigrants, we  
 should be firmly united, we  
 should be firmly united, we  
 (See 4th Page.)

FACSIMILE REPRODUCTION OF FIRST PAGE OF EARLY ISSUE OF THE MISSOURI  
 GAZETTE, OLDEST NEWSPAPER IN MISSOURI.

Jefferson: Organized December 8, 1818. Called for Thomas Jefferson.  
 Died July 4, 1826. The first monument (of Quincy granite) erected at the grave  
 of Jefferson, having been afterwards displaced by the marble shaft ordered by  
 Congress, was removed to the campus of the Missouri University at Columbia in  
 1883, where it now stands. Jefferson was the chief promoter of the purchase of  
 Louisiana, Missouri was the first State carved out of its territory, and Missouri  
 University the first University of the first State.

Johnson: Organized December 13, 1834. Called for Richard M. Johnson,  
 of Kentucky. Died of apoplexy, November 19, 1850.

Names and  
 organization of  
 Missouri  
 counties—  
 Jefferson and  
 Johnson.

More "Mechanical" Ads. **THE ST. LOUIS REPUBLIC.** L. 100 "Household Goods" Ads.

NINETY-SIXTH YEAR ST. LOUIS, MO., TUESDAY, NOVEMBER 10, 1903. PRICE 10 CENTS.

SEE THE NEW YORK TRIBUNE FOR LEADING MERCHANTS' MIDWEEK BARGAINS.

**BATTLESHIP TESTIMONIAL.** **WILL KEEP TROOPS FROM EMBARKING AGAINST PANAMA.**

**MRS. D. R. FRANCIS SUCCEEDS MRS. J. L. BLAIR AS PRESIDENT OF THE ST. LOUIS WOMEN'S CLUB.**

**HAZ ASSURES DESMOND OF HIS DEEP INTEREST.**

**MISSOURI ASKS GOVERNMENT TO PAY WAR CLAIM.**

**GRAND JURY TO RESUME DOCKLE INQUIRY TO-DAY.**

**ROOSEVELT ASKS NAHMA TO PLEASE TAKE THE REINS.**

**PRESIDENT WANTS A BUSINESS MAN FOR POSTMASTER.**

**LEADING TOPICS TO-DAY'S REPUBLIC.**

**PLANS FOR ELECTRIC LAUNCH APPROVED.**

**ROOSEVELT'S DISCRETION.**

**HAZ ASSURES DESMOND OF HIS DEEP INTEREST.**

**MISSOURI ASKS GOVERNMENT TO PAY WAR CLAIM.**

**GRAND JURY TO RESUME DOCKLE INQUIRY TO-DAY.**

**ROOSEVELT ASKS NAHMA TO PLEASE TAKE THE REINS.**

**PRESIDENT WANTS A BUSINESS MAN FOR POSTMASTER.**

**LEADING TOPICS TO-DAY'S REPUBLIC.**

**PLANS FOR ELECTRIC LAUNCH APPROVED.**

**ROOSEVELT'S DISCRETION.**

FACSIMILE REPRODUCTION OF FIRST PAGE OF ST. LOUIS REPUBLIC—SUCCESSOR  
TO THE MISSOURI GAZETTE.

Knox: Organized February 14, 1845. Called for General Henry Knox, of the Revolution. Died October 25, 1806.

Laclede: Organized February 24, 1849. Called for Pierre Linguest Laclede, founder of St. Louis. Died June 20, 1778.

Lafayette: First called Lillard and organized November 16, 1820, after

Names and  
organization of  
Missouri  
counties—  
Knox to  
Lafayette.

James Lillard, an old citizen. Changed to Lafayette, February 16, 1825, who died at Paris, May 20, 1834.

Lawrence: Organized February 25, 1845. Called for Captain James Lawrence, of the "Chesapeake," in the war of 1812. Died, 1813.



IN A SOUTHEAST MISSOURI LUMBER CAMP.

Lewis: Organized January 2, 1833. Called for Meriwether Lewis, of Lewis and Clark's expedition in 1805-6. Died September, 1809.

Lincoln: Organized December 14, 1818. Major Christopher Clark, one of the first settlers, was a member of the legislature in 1818 and a genuine frontiersman and an earnest advocate of the establishment of Lincoln county. He made a speech in which he said: "Mr. Speaker, I'm in favor of the new county, I was born in Lincoln county, North Carolina; I lived a year or so in Lincoln county, Kentucky, and I want to live and die in Lincoln county, Missouri." His speech was loudly applauded and the county was organized and named as he desired. It was however in fact called Lincoln in memory of Gen. Benjamin

Names and  
organization of  
Missouri  
counties—  
Lawrence to  
Lincoln.



A CAMPING PARTY IN SOUTHEAST MISSOURI.



A LONE FISHERMAN ON A SOUTH MISSOURI STREAM.

Lincoln, of Massachusetts, a distinguished officer and special friend of Washington, who in addition to great heroism in several battles, was deputed to receive the sword of Cornwallis on his surrender at Yorktown on October 17, 1781. He died at Hingham, Massachusetts, May 10, 1810.

Linn: Organized January 7, 1837. Called for Lewis F. Linn, United States Senator from Missouri, 1833-1843, who died at Ste. Genevieve, October 3, 1843.

Livingston: Organized January 6, 1837. Called for Edward Livingston, Secretary of State under President Jackson. Died May 23, 1836.

McDonald: Organized March 3, 1849. Named in honor of Sergeant McDonald, one of "Marion's Men," in the Revolutionary war, Sergeants Jasper and Newton being the other two.



ON A DUNKLIN COUNTY FARM.



A SCOTT COUNTY FARM HOUSE.

Names and organization of Missouri counties—Linn to Marion.

Macon: Organized January 6, 1837. Named in honor of Nathaniel Macon of North Carolina, of the Seventh, Eighth and Ninth Congresses and United States Senator in the nineteenth and twentieth. Died June 29, 1837.

Madison: Organized December 14, 1818. Called for James Madison, President. Died June 28, 1836.

Maries: Organized March 2, 1855. Called after two of the principal streams in the county; is a French name and the plural of Marie or Mary.

Marion: Organized December 23, 1826. Called for Francis Marion, of the Revolution. Died in South Carolina, 1795.



**Mercer:** Organized February 14, 1845. Called for John F. Mercer, a soldier of the Revolution from Maryland. Died August 30, 1821.



LOGGING IN CALLAWAY COUNTY.

**Miller:** Organized February 26, 1837. Called for Governor John Miller, of Missouri; was governor from 1825 to 1832. Died March 18, 1846.

**Mississippi:** Organized February 14, 1845. Borders on the Mississippi river and called after the stream.

**Moniteau:** Organized February 14, 1845. An Indian name, and doubtless a corruption of Manito, an Indian name for Deity or Great Spirit.

**Monroe:** Organized January 6, 1831. Called for James Monroe, president. Died July 4, 1831.

**Montgomery:** Organized December 14, 1818. Called for General Richard Montgomery, of the Revolution. Killed in the assault on Quebec, December, 1775.

Names and  
organization of  
Missouri  
counties—  
Mercer to  
Newton.



OWNED BY E. T. LETTON & SON, WALKER, VERNON COUNTY.

**Morgan:** Organized January 5, 1833. Called for General Daniel Morgan, of the Revolution, who displayed great bravery at the battle of the Cowpens in the defeat of Tarlton and died in 1802.

**New Madrid:** Organized October 1, 1812. One of the four original districts and organized as a county on the day named by a proclamation of Governor Clark. Called New Madrid in contradistinction to Old Madrid, of Spain, the Spanish capital.

**Newton:** Organized December 31, 1838. Called for Sergeant Newton, a comrade of Sergeant Jasper, at Ft. Moultrie during the Revolution. Its county seat, Neosho, is a corruption of the Indian name Neozho.

**Nodaway:** Organized February 14, 1845. Named after its principal river, which in the Pottawattamie tongue, signifies "Placid," or "Placid Water."

**Oregon:** Organized February 14, 1845. Named for State of Oregon.

**Osage:** Organized January 29, 1841. Named for the Osage river, the principal stream of the county, an Indian name.

**Ozark:** Organized January 29, 1841. Called for mountains of that name.

**Pemiscot:** Organized February 18, 1861. Named for its principal bayou, Pemiscot, which means "Liquid Mud," an Indian name.

**Perry:** Organized November 16, 1820. Called for Oliver Hazard Perry, of Lake Erie naval battle memory. Died, 1819.

**Pettis:** Organized January 26, 1833. Called for Spencer Pettis, member of Congress from St. Louis from 1829 to 1831, who was killed in a duel by Major Thomas Biddle. August 27, 1831, aged 29 years.

**Phelps:** Organized November 13, 1857. Called for John S. Phelps, of Springfield, Missouri, member of congress and governor. Died November 20, 1886.

**Pike:** Organized December 14, 1818. Called for Montgomery Pike, commander of the expedition up the Mississippi river in 1806.

**Platte:** Organized December 31, 1838. Named after its principal stream—an Indian name.

**Polk:** Organized March 13, 1835. Called for James K. Polk, of Tennessee; elected president over Henry Clay in 1844. Died June 15, 1849.



GRAND RIVER COLLEGE, GALLATIN.

Names and  
organization of  
Missouri  
counties—  
Nodaway to  
Polk.



AT SCHLICHT'S SPRING, PULASKI COUNTY.

**Pulaski:** Organized December 15, 1818. Named for Count Pulaski, a Polish general of Revolutionary fame, who fell at the siege of Savannah, 1779.

**Putnam:** Organized February 28, 1845. Called for General Israel Putnam, of Bunker Hill fame, 1775. Died, 1790.

**Ralls:** Organized November 16, 1820. Called for Daniel Ralls, a member of the legislature from Pike county, who died in 1820 while the legislature was in session, and whose casting vote elected Col. Benton to the United States Senate.

**Randolph:** Organized January 22, 1829. Called for John Randolph, of Roanoke, Virginia. Died May 24, 1833.

**Ray:** Organized November 16, 1820. Called for John Ray, a member of the constitutional convention of 1820 from Howard county.

**Reynolds:** Organized February 25, 1845. Called for Thomas Reynolds, of Howard, governor, who committed suicide while governor, February 9, 1844.

**Ripley:** Organized January 5, 1853. Called for General Eleazer W. Ripley, of the war of 1812 and conspicuous for gallantry in defense of Fort Erie on August 15, 1814, and member of Congress from Louisiana, 1835-39. Died at West Feliciana, Louisiana; March 2, 1839.

**St. Charles:** Organized October 1, 1812. One of the original districts; organized as a county on the day named by proclamation of Governor Clark. Named in honor of Charles V., of France, who died 1380.

**St. Clair:** Organized January 29, 1841. Called for General Arthur St. Clair, of the Revolution.

**St. Francois:** Organized December 19, 1821. Named after its principal stream.

**Ste. Genevieve:** Organized October 1, 1812. Called after a female saint of France, hence the abbreviation of "Ste." One of the original districts, and organized as a county on the day named by proclamation of Governor Clark.

**St. Louis:** Organized October 1, 1812. Also one of the original districts, and organized as a county by proclamation of Governor Clark. Called St. Louis in honor of Louis XIV., of France, who died in 1715, after an auspicious reign of 52 years.

**Saline:** Organized November 25, 1820. Named because of its salt springs.

**Schuyler:** Organized February 14, 1845. Called for General Philip Schuyler of the Revolution. Died, 1804.

**Scotland:** Organized January 29, 1841. Named after one of the grand divisions of the kingdom of Great Britain.

**Scott:** Organized December 28, 1821. Called for John Scott, first member of Congress from Missouri, from 1821 to 1827. Died in Ste. Genevieve in 1861.

**Shannon:** Organized January 29, 1841. Called for Judge George W. Shannon, called "Peg Leg Shannon" because he had lost a leg. Died 1836.

**Shelby:** Organized January 2, 1835. Called for Governor Isaac Shelby, of Kentucky. Died July 18, 1826.

**Stoddard:** Organized January 2, 1835. Called for Major Amos Stoddard, U. S. A., who on March 10, 1804, in St. Louis, received on the part of the United States from France, authority to govern Louisiana as purchased the year before by Jefferson. At the siege of Fort Meigs, Ohio, in 1813, he received wounds of which he died.



SHEEP OWNED BY HOPSON GLASCOCK, OAKWOOD.



HUNTING AND FISHING CLUB ON THE ST. FRANCIS RIVER.

**Stone:** Organized February 10, 1851. Named after early settlers of that name, from east Tennessee.

**Sullivan:** Organized February 16, 1845. Called for James Sullivan, of Revolutionary fame; a member of the Continental Congress of 1782. Died December 10, 1808.

**Taney:** Organized January 16, 1847. Called for Chief Justice Roger B. Taney, of Maryland, of the supreme court, who in 1856 delivered the celebrated opinion in the Dred Scott case. Died October 12, 1864.

**Texas:** Organized February 14, 1835. Called after the Republic of Texas.

**Vernon:** Organized February 17, 1851. In honor of Miles Vernon, of Laclede county, a State senator.

**Warren:** Organized January 5, 1833. Called for Joseph Warren, a Revolutionary patriot, who fell at Bunker Hill, under Putnam, June 17, 1775.

**Washington:** Organized August 21, 1813. Called for George Washington. Died December 14, 1799.

**Wayne:** Organized December 11, 1818. Called for Anthony Wayne, of Stony Point, of Revolutionary fame. Died December 15, 1796.

**Webster:** Organized March 3, 1855. Named for Daniel Webster. Died October 24, 1852.

**Worth:** Organized February 8, 1861. Called for General William J. Worth, of the Florida and Mexican wars. Died at San Antonio, Texas, May 7, 1849.

Name and  
organization of  
Missouri  
counties—Stor  
to Worth.



ST. MARY'S SEMINARY, FERRYVILLE.

Wright: Organized January 29, 1841. Called for Silas Wright, United States Senator, of New York. Died August 27, 1847.

The laws of Missouri are just, wisely-drawn and fearlessly executed. Crime is punished and the individual is protected in his liberty and property. Certain provisions of the statutes relative to general matters are herewith given:

ATTACHMENTS:—Bonds for double the amount of debt must be filed, and there are many grounds to be assigned. Non-residents can attach non-resident's property.

Missouri laws—  
attachments,  
aliens, arbitra-  
tion, assign-  
ments.



OWNED BY B. R. MIDDLETON, MEXICO.

ALIENS:—It is unlawful for any person not a citizen of the United States, or who has not declared his intention to become one, or any corporation not created under the laws of some of the States, to hold or own real estate, except such as is acquired by inheritance or in collection of debts. All property held in violation of this law is forfeited to the State.

ARBITRATION: — Parties to a controversy may, in writing, submit the same to the arbitrators. The award must be in writing, subscribed by the arbitrators and attested by a subscribing witness. The award may, upon the motion, be confirmed by the court designated in the submission, fifteen days' notice of the motion having been given. Provisions exist for the vacation of the award on various grounds. Upon the confirmation of an award judgment is rendered which may be enforced as other judgments.

ASSIGNMENTS:—Are for the benefit of all creditors and the assignor's debts are only discharged to the extent of the dividends paid; the assignee holds court for three days within three months from date of assignment, to allow demands against the assignor's estate. All creditors who fail to present their demands for allowance at that time are excluded from participation in the estate. Any



ON THE TRAINING GROUND OF JOHN H. HOOK, PARIS.

judgment confessed by the assignor within thirty days prior to the date of assignment is void. Quarterly reports are required of assignee.

**BILLS AND NOTES:**—Three days of grace are allowed on bills and notes of exchange, except sight drafts and orders. Parties holding notes or bills of exchange for collection can sue without naming the real owner. For all purposes whatever, as regards the presentation for payment



Bills and notes.



OWNED BY D. F. RISK, WEST N.

DUROCK JERSEY, OWNED BY  
T. W. BAKER, MALTA BEND.

A TYPICAL MISSOURI  
HOG, "KEEPSAKE."



or acceptance and of presenting and giving notice of dishonor of bills of exchange, bonds, promissory notes, or other mercantile paper, public holidays are treated and considered as Sunday. And all such paper falling due on a holiday or Sunday shall be considered as falling due on the next such

succeeding day, unless such succeeding day be a holiday or Sunday; and in such case, it shall be considered as falling due on the date previous. Protest is evidence of a demand, and refusal to pay a bill or promissory note at the time, and in the manner stated in such protest.

**BILLS OF LADING:**—Bills of lading and warehouse receipts are made negotiable by written indorsement and delivery in the same manner as bills of exchange and promissory notes, unless the word "non-negotiable" be plainly written or stamped on the face thereof. Warehouse men are prohibited from issuing receipts or other vouchers for goods and merchandise or other commodity without actually having received the same in the store or upon the premises of such warehouse.

Bills of lading.

**CHATTEL MORTGAGES:**—No special limitation exists as to when a chattel mortgage may be foreclosed. In this State the settled law, as declared by the supreme court, in the line of decisions that a mortgage upon stock in trade, which is to remain in the possession of the mortgagor and be dealt with by him, is fraudulent and void as to creditors and subsequent purchasers. Mortgages and deeds of trust upon personalty are void as to the creditors of the grantors and purchasers without notice thereof, unless the property be delivered to and retained by the mortgagee or beneficiary in the deed of trust or trustee, or the instrument recorded in the county where the grantor resides.

Chattel mortgages.

**CORPORATIONS:**—Are created under the general laws. Private charters are prohibited. All corporations except municipal corporations must be formed under a general statute pertaining to the subject. The several classes of corporations are as follows: First, railroad companies; second, macadamized, graded and plank road companies; third, telegraph and telephone companies; fourth, savings banks and fund companies; fifth, manufacturing and



Corporations.

TYPE OF MISSOURI CATTLE.



A VIEW OF CARTERVILLE.

Missouri corporation law.



IN A BUSY MISSOURI TOWN.



ELKS CLUB HOUSE, CARTHAGE.

business companies; sixth, mutual, savings, fund, loan and building companies; seventh, benevolent, religious, scientific, educational and miscellaneous associations; eighth, trust companies; ninth, mutual savings societies; tenth, training schools; eleventh, police and fire department associations; twelfth, booming and rafting companies. Stockholders are only liable for the par value of the stock subscribed by them. Every corporation organized in Missouri must have a chief office or place of business in the State and at least three resident directors. The amount of the capital stock of the corporation shall not be less than \$2,000

nor more than \$10,000,000. The articles of association must be signed and acknowledged by all the parties thereto and recorded in the office of the recorder of deeds of the county in which the corporation is located. A certified copy of these articles of association is filed with the Secretary of State, who issues a certificate to the effect that the corporation has been duly organized, and this certificate is evidence of corporate existence in all the courts of the State. The State tax for issuing certificates of incorporation is \$50 for the first \$50,000 or

less of the capital stock of the association, and an additional sum of \$5 for every additional \$10,000 of capital stock. In addition to this tax there is a charge which goes to the school fund amounting to 25 cents on every \$1,000 of the capital stock. Domestic corporations, other than railroad or insurance companies, are required to make an annual report on July 1, to the Secretary of State, of the location of the principal office, the name of the president and secretary, the amount of its

capital stock, subscribed and paid up, the par value of its stock and the actual value of its stock at the time of making the report. This report must also show the cash value of all personal property and of all real estate owned by the corporation situated within the State on June 1 immediately preceding, and the amount of taxes, city, county and State, paid by the corporation in this State for the year last preceding the report.

Foreign corporations, organized for pecuniary profits, doing business in the State, are required to maintain an office in this State for the transaction of business where legal service may be obtained. They are not permitted to mortgage or otherwise incumber their real or personal property situated in this State, to the injury or exclusion of any citizen or corporation of the State, creditor of such foreign corporation. Foreign corporations doing business in this State must file in the office of the Secretary of State a certified copy of the charter or certificate of incorporation and pay into the treasury of the State upon the proportion of its capital stock represented by its property and business in Missouri. A fine of \$1,000 and other

DAIRY HERD, HOLSTEINS, M. E. MOORE, CAMERON.

severe punishments, including a denial of right to maintain any action or suit in any of the courts of this State, are provided for a violation of the law.

**DESCENT OF PROPERTY:**—When a person having title in real estate or personal property undisposed of or otherwise limited by marriage settlement shall die intestate it shall descend and be distributed to his kindred, male or female, subject to the payment of his debts and the widow's dower, in the following course: (1) To his children or their descendants in equal parts; (2) if there be no children or their descendants, then to his father, mother, brothers and sisters, and their descendants, in equal parts; (3) if there be no children or their descendants, father, mother, brothers or sisters, nor their descendants, then to the husband or wife; if there be no husband or wife, then to the grandfather, grandmother, uncles and aunts and their descendants in equal parts; (4) if there be no children or descendants, father, mother, brothers, sisters or their descendants, husband or wife, grandfather, grandmother, uncles and aunts and their descendants, then to the great-grandfathers, great-grandmothers and their descendants in equal parts, and so on in other cases without end, passing to the nearest lineal descendants and their children and their descendants in equal parts. If there be no children or their descendants, father, mother, brothers nor sisters, nor their descendants, husband or wife, nor any parental or maternal kindred capable of inheriting, the whole shall go to the kindred of the husband or wife of the intestate, in the like course as if such husband or wife had survived the intestate and then die entitled to the estate. In all cases the heirs of half-blood take only half the share of like heirs of whole blood. If all heirs are in the same degree of relation to the decedent they take per capita. When the husband dies without issue the wife takes one-half of the estate. If the wife dies having had children born alive, the husband is entitled to courtesy in wife's real property. Debts are proven either by oral testimony given in open court, or by deposition. Non-residents are required to give security for costs before filing suit. The security may be by bond or by a deposit of money in court to cover the costs to accrue.

Descent of p

**DIVORCE:**—The circuit court has jurisdiction in all cases of divorce, alimony or maintenance. Cases are tried without jury. One year's residence is required, unless offense was committed in the State, or one or both parties resided in the State. The charges must be: Adultery; conviction of felony after marriage or before, without knowledge of other party; cruel and barbarous treatment, endangering life; desertion for one year; habitual drunkenness for one year; impotency, existing at time of marriage and continuing; intolerable treatment; pregnancy of wife before marriage by man other than husband and without his knowledge; vagrancy of husband.

Divorce.

**ESTATES:**—Of deceased persons are administered upon and settled in the probate court, which issues letters of administration. In granting letters of administration priority in right is granted as follows: (1) To the husband or wife; (2) to one or more of the distributees of the estate, according as the discretion of the court, or judge, or clerk, thereof in vacation may direct. Non-resi-

Estates.



dents are not allowed to administer upon estates of deceased persons even through letters testamentary to them. Executors and administrators are required to give bond with two or more securities, residents of the county issuing letters of administration. Such bonds are made to the State of Missouri for an amount double the estimated value of the estate. All claims must be presented within two years of notice of publication that the estate is in the hands of administrators. The classification and priority of demands against deceased persons are as follows: (1) Funeral expenses; (2) expenses of last sickness, wages of servants and claims for medicine and medical attendance during the last sickness of deceased; (3) all debts, including taxes, due this State or any county or incorporated town or city therein situated; (4) all judgments rendered against deceased in his lifetime and judgments upon attachments levied during the lifetime of the deceased; (5) all demands without regard to quality which shall be legally exhibited against the estate within one year after the granting of the first letters on the estate; (6) all demands exhibited and presented to the court for allowance after the end of one year and within two years after letters have been granted, said two years being to run from the date of the letters where notice is published within thirty days after the granting of the same, and in all other cases said two years begin to run from the date of publication of notice.



NEW BINDERS GOING FROM MEMPHIS TO  
SCOTLAND COUNTY WHEAT FIELDS.

**EXEMPTIONS:**—Every householder or head of family may hold a homestead, with issues and products thereof, free from attachment or execution. If in the country such homestead shall not exceed 160 acres valued at \$1,600, and if in the cities of 40,000 or more, shall not exceed 18 square rods of land valued to exceed \$3,000; if in city or town less than 40,000 it shall not exceed 30 square rods of ground of value not exceeding \$1,500. Wearing apparel of the persons, and the necessary tools and implements of any mechanic, are exempt from execution. The following property is also exempt to every head of a family: Ten head of choice hogs; ten head of choice sheep, and the products thereof in wool, yarn or cloth; two cows and calves; two plows, one axe, one hoe, and one set of plow gears, "and all necessary farm implements for the use of one man;" working animals to the value of \$150, or two work animals; the spinning wheel and cards, one loom and apparatus necessary to manufacturing cloth in a private family; all the spun yarn, thread and wool not exceeding 25 pounds each; all wearing apparel of the family, four beds with the usual bedding, and such other household and kitchen furniture not exceeding the value of \$100 as may be necessary for the family; all arms and military equipments required by law to be kept; all such provision as may be found on hand for family use, not exceeding \$100 in value; the Bibles and other books used in the family; lettered gravestones and one pew in a house of worship. In lieu of other property, lawyers and ministers may select such books as may be necessary to their profession, and physicians their medicines. In lieu of the property mentioned above each head of a family may select and hold exempt any other property, real, personal or mixed, or debts and wages, not exceeding in value the sum of \$300. Wife may claim exempt personal property when husband has absented himself. Personal property, except in the hands of an innocent purchaser for value without notice, is subject to execution against purchaser for the purchased price. No property is exempt from execution issued upon a judgment for not exceeding \$90, recovered by a house servant or common laborer for personal services rendered to defendant, provided the suit is brought within six months after the last service is rendered. The mem-

Missouri law—  
exemptions.

bers of a firm are neither severally nor jointly entitled to partnership assets exempted to heads of families.

**GARNISHMENT:**—Writs of attachment may be levied by garnishing the debtor of the defendant as well as by a levy upon property. "All persons shall be subject to garnishment on attachment or execution who are named as garnishees in the writ or have in their possession goods, moneys or effects of the defendant not actually seized by the officers, and all debtors of the defendant and such others as the plaintiff or his attorney shall direct to be summoned as garnishees." A garnishee can relieve himself by the payments of his debts into the court.

If he denies that he is indebted, he can have his case tried in court as other causes. Public officers are not liable to be summoned as garnishees, nor shall any person be charged as garnishee on account of wages due from him to a defendant in his employ for the last thirty days' service, provided such employe is the head of a family and a resident of this State.

**LIENS:**—Every mechanic or other person who shall do or perform any work or labor upon or furnish any material, fixtures, engine, boiler, or machinery for any building, erection or improvements upon land, or for repairing the same, under or by virtue of any contract with the owner or proprietor thereof, or his agent, trustee, contractor or subcontractor, upon complying with the provisions of this article, shall have for his work or labor done, or materials, or fixtures, engine, boiler or machinery furnished, a lien upon such building, erection or improvements, and upon the land belonging to such owner or proprietor on which the same are situated, to the extent of one acre; or if such building, erection or improvement be upon any lot of land in any town, city or village, then such lien shall be upon such building, erection or improvements, and the lot or land upon which the same are situated, to secure the payment of such work or labor done, or materials, fixtures, engine, boiler, machinery furnished, as aforesaid. It shall be the duty of every original contractor within six months, and every journeyman and day laborer within sixty days, and every other person seeking to obtain the benefit of the provisions of this article within four months after the indebtedness shall have accrued, to file with the clerk of the circuit court of the proper county a just and true account of the demand due him for them after all just credits have been given, which is to be a lien upon such building or other improvements, and a true description of the property, or so near as to identify the same, upon which the lien is intended to apply, with the name of the owner, or contractor, or both, if known to the person filing the lien, which shall, in all cases, be verified by the oath of himself or some credible witness. The circuit court has jurisdiction for the enforcement of liens. In counties of over 50,000, justices of the peace have also jurisdiction in amounts not exceeding \$250. In counties of less than 50,000, justices of the peace have jurisdiction in amounts not exceeding \$150. Actions for the enforcement of mechanics' liens must be commenced within ninety days after filing the lien and prosecuted without unnecessary delay. The statutes also give liens for keeping horses and other animals, liens of inn and boarding house keepers, liens of contractors, laborers and material men against railroads.

**LIMITATIONS:**—There is no statutory limitation to judgments; execution may issue at any time within ten years and after a lapse of ten years, unless within that time payments thereon have been made and the law presumes them to be paid. Upon contracts in writing the limitation is ten years, upon open ac-



REPRESENTATIVE FARM HOUSE, LAFAYETTE COUNTY.

Garnishment.

Liens.

Limitations.

counts five years, upon actions against public officials for any failure to perform duty three years, upon actions for libel, slander, assault, battery, false imprisonment or claims against the estates, two years.

Marriage law.

**MARRIAGE LAW:**—License required; parental consent necessary at 15 for males and 12 for females; not necessary at 21 for males and 18 for females; prohibited degrees, nearer of kin than first cousins.

Mortgage deeds.

**MORTGAGE DEEDS:**—Must be executed and acknowledged like other deeds and must be recorded. The usual form of giving security in this State is by deed of trust. In trust deeds the property conveyed to a trustee with power to sell and convey the property absolutely if the debt, which is usually expressed by promissory notes, is not paid according to the terms mentioned in the conveyance. Foreclosure under deeds of trust is generally without suit. Real estate conveyed in such deeds can not be sold by the trustee without giving at least twenty days' publication. Mortgages and deeds of trust may be satisfied upon the margin of the record in the office of the recorder of deeds. It is necessary at the time of the satisfaction of the deed of trust or mortgage as stated above to produce the notes for cancellation. Mortgages and deeds of trust may also be satisfied by the execution of deeds of release, which must be acknowledged in the same form as other deeds. The notes secured by mortgages and deeds of trust must be presented to the recorder for cancellation before deeds of release are admitted to record.

Suits.

**SUITS:**—For the collection of debts and for the enforcement of legal demands may be brought by summons either in the county in which the defendant resides or in the county wherein such plaintiff resides, and defendant can be found; or, if there are several defendants in any county in which one of them resides; or when the defendants are all non-residents, then in any county. Attachments may be obtained at any time in aid of summons by complying with the statutes concerning attachments. All civil actions must be prosecuted in the name of the real party of interest. Where a partnership is a party, the names of the individuals composing such partnership should be fully set out. There is no process provided by law for the detention of a debtor who is about to leave the State; nor does imprisonment for debt exist here in any form. The assignee of non-negotiable paper can maintain suit, and an attorney or other holder of negotiable paper, in whose hands the same has been placed for collection, can maintain suit in his own name.

Voting.

**VOTING:**—The elector must be a citizen of the United States, or alien who has declared his intention not less than one year nor more than five before election. Residence required is one year in State, sixty days in county, town and precinct. Persons excluded are inmates of poorhouses, or asylums at public expense, convicts or those convicted of infamous crimes, and soldiers, sailors and marines, or those in the military service not deemed residents of the State; Australian ballot system in force.

Wills.

**WILLS:**—Every male over 21, of sound mind, may devise all his property, except one-third dower to widow, and every male over 18, of sound mind, may by will dispose of personal property, save dower. All females of 18 and upward, of sound mind, may dispose by will of their real and personal property subject to rights of husband, if any, to his curtesy therein. Every will must be in writing, signed by testator and attested by two competent witnesses.

Women's estates.

**WOMEN:**—The wife can control her separate estate, hold and own property which is not subject to debts of husband. May sue in her own name, with or without her husband joining, or be sued in any court having jurisdiction with the same force and effect as if single.



**W**RITING of Missouri at the World's Fair is writing the story of the World's Fair. The Louisiana Purchase Exposition celebrated the acquisition by the United States of the territory of which Missouri is a part; the Exposition was suggested by a Missourian, it was held on Missouri soil, and the largest appropriation for Exposition purposes by any State was by Missouri. In every Exposition building where a State could make an exhibit Missouri's exhibit was found and it the best. In every building where only exhibits by individuals, business firms or corporations were permitted, Missourians made display of the products of their industry and skill. The Missouri State building was the finest upon the grounds. From the Exposition's opening day it was thronged with visitors. The displays of the State in Agriculture, Horticulture, Education, Mining, Forestry, Live Stock, Poultry, Dairying, Fish and Game and Woman's Work, were unexcelled in artistic beauty and comprehensiveness.

Missouri leads the world.

The exhibit made by Missouri at the World's Fair was the result of the labors of the Board of Commissioners to the Louisiana Purchase Exposition, appointed by Governor A. M. Dockery, under the direction of which the one million dollars voted by the people of Missouri for an exhibit of the State's resources were expended. At the general election in November, 1900, the people adopted a constitutional amendment permitting the legislature of the State to appropriate a million dollars for World's Fair purposes. A bill appropriating the amount and providing for a Commission to direct its expenditure was passed by the next general assembly and was signed by the governor April 17, 1901. The same bill was re-enacted in 1903, with necessary changes to meet postponement of the Fair, and was signed by the governor March 24, 1903. On the 28th of May, 1901, Governor Dockery appointed as the Board of Commissioners: M. T. Davis, of Springfield; F. J. Moss, of St. Joseph; B. H. Bonfoey, of Unionville; W. H. Marshall, of Morehouse; L. F. Parker, of St. Louis; D. P. Stroup, of Norborne; N. H. Gentry, of Sedalia; J. O. Allison, of New London, and H. C. McDougall, of Kansas City. On August 18, 1902, H. C. McDougall resigned, and on January 16, 1903, J. H. Hawthorne, of Kansas City, was appointed his successor. When the law was re-enacted in 1903, the board was reappointed. The board elected M. T. Davis, president; F. J. Moss, vice-president; B. H. Bonfoey, secretary, and W. H. Marshall, treasurer. Later the ill health of Mr. Marshall caused his temporary absence from the State and J. H. Hawthorne succeeded him as treasurer. It was under personal direction of the board thus constituted, together with the helpful interest of Governor Dockery, that the Missouri building was erected and the various exhibits of the State were made. As committee upon plan and scope, Commissioners J. O. Allison and B. H. Bonfoey reported a division of the work of the Commission into various departments, each to be in

Appointment of Missouri World's Fair Commissioners.

*Photo in heading: Missouri State Building at World's Fair.*



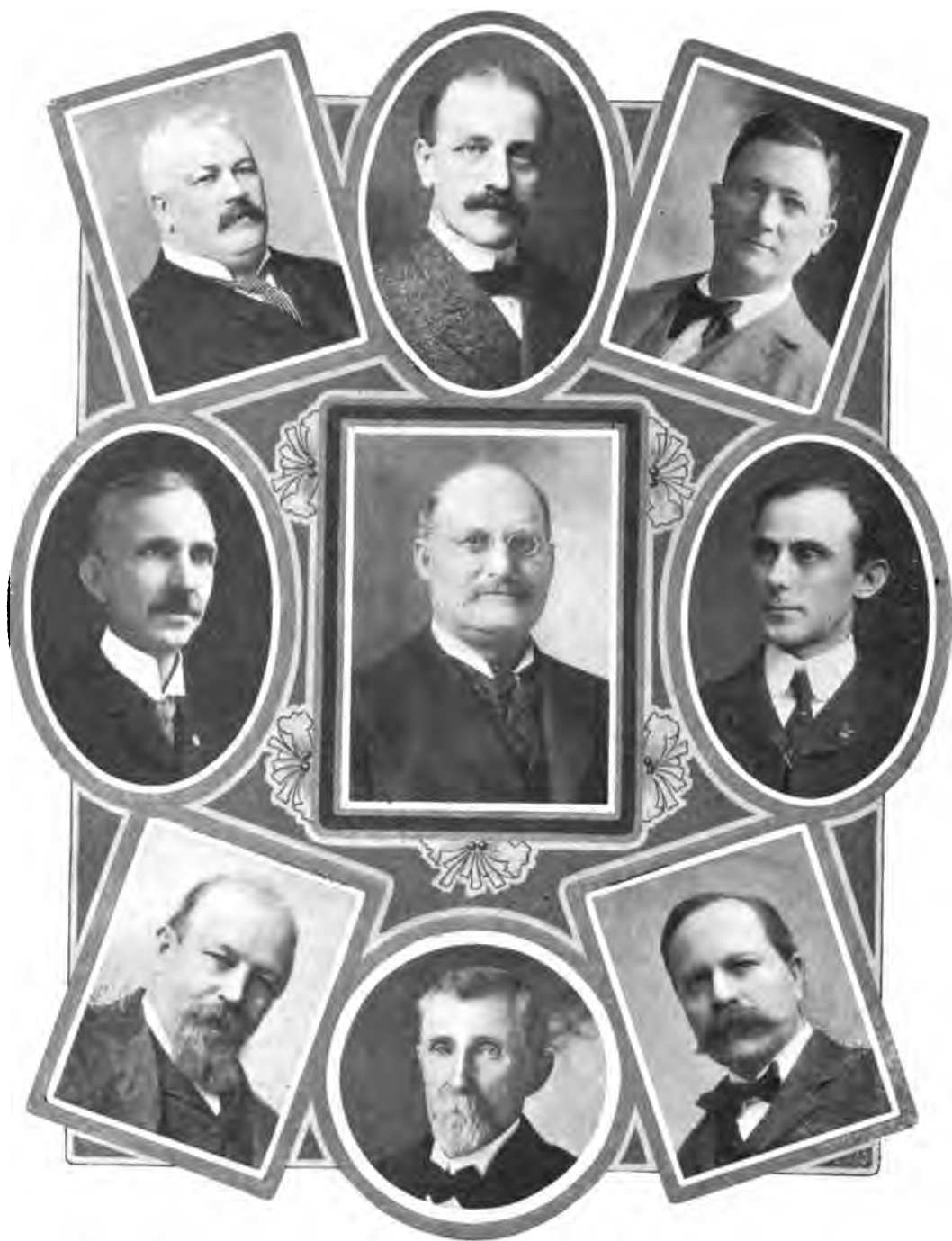
WHEN SITE FOR MISSOURI BUILDING WAS ACCEPTED.

Departments of  
the Commis-  
sion's work.

charge of a Commissioner as Chairman with a Superintendent. Upon the final decision of the Commission the departments determined upon were: Agriculture, Horticulture, Live Stock, Poultry, Dairying, Mining, Education and Social Economy, Forestry, Fish and Game, Woman's Work, and Publication. Superintendents for these departments were chosen. In one or two instances there were changes, but the final list of Commissioners in charge and the Superintendents includes: Agriculture—Commissioner, J. O. Allison; Superintendent, H. J. Waters. Horticulture—Commissioner, B. H. Bonfoey; Superintendent, L. A. Goodman. Mining—Commissioner, M. T. Davis; Superintendent, G. E. Ladd. Education—Commissioner, J. H. Hawthorne; Superintendent, G. V. Buchanan. Forestry—Commissioner, W. H. Marshall; Superintendent, T. P. Russell. Fish and Game—Commissioner, W. H. Marshall; Superintendent, J. H. Ridgway. Poultry—Commissioner, D. P. Stroup; Superintendent, Henry Steinmesch. Dairying—Commissioner, D. P. Stroup; Superintendent, W. W. Marple. Publication—Commissioner, F. J. Moss; Superintendent, Walter Williams. It is an interesting fact that the Missouri Commission selected as Superintendent in no instance an active aspirant for appointment. In Social Economy, Commissioner J. H. Hawthorne was in charge; in Woman's Work, B. H. Bonfoey, and in Live Stock, Commissioner N. H. Gentry, but no Superintendents were named. M. T. Davis, F. J. Moss, and Governor Dockery, *ex officio*, constituted the special building committee.

The Missouri State  
building.

The Missouri State Building, a temporary structure, the largest, handsomest and most attractively furnished of the many State buildings, was designed by Isaac S. Taylor, of St. Louis, architect, and was erected at a cost, including furnishing, of \$250,000. The contractors were Strehlow & Phelps, of St. Louis. It was the scene during the Exposition of numerous entertainments, conventions and meetings of every kind. The keynotes of the Missouri Building were public comfort, culture and social enjoyment. A golden dome surmounted by an emblematic statue of "The Spirit of Missouri," by Miss Caroline S. Wood, of St. Louis, crowned the building. Over the main entrance was this inscription: "Embracing within her confines all the elements of an empire devoted to all the Arts and Sciences that advance civilization, Missouri, the central State of the Louisiana Purchase, greets her sister States and welcomes the world." Around the building were the names of these great Missourians: Thomas Hart Benton, Francis P. Blair, B. Gratz Brown, David R. Atchison, David Barton, Meriwether Lewis, Edward Bates, Lewis F. Linn, Lewis V. Boggy, Aylett H. Buckner, John S. Phelps, James S. Green. The building contained rooms adapted for various purposes, two large halls in either wing, a commodious auditorium or State Hall, in which conventions were held, a handsome rotunda, with brilliant electric fountain, the suite of Governor Dockery, men's



**MISSOURI COMMISSIONERS TO THE LOUISIANA PURCHASE EXPOSITION.**

**J. H. HAWTHORNE, Treasurer.**  
**B. H. BONFOEY, Secretary.**  
**L. F. PARKER.**

**F. J. MOSS, Vice-President.**  
**M. T. DAVIS, President.**  
**D. P. STROUP.**

**N. H. GENTRY.**  
**W. H. MARSHALL.**  
**J. O. ALLISON.**

The Missouri State  
building.

parlors, women's parlors, press room, and executive offices. On the second floor were rooms for the Commissioners, hostesses and matron, and other rooms fittingly furnished. The building was warmed by steam in cold weather and refrigerated by cold air in warm weather. The approaches and elevations of the building were adorned with statuary, heroic figures of Thomas Jefferson and Napoleon Bonaparte being placed at the main entrance. Concerts were given during the Exposition period daily. All the privileges of the building were absolutely free to all. In the West Hall was placed a collection of paintings by Missouri artists and the fine bell presented by citizens of the State to the battleship Missouri. In the East Hall was a model public library shown by the St. Louis Public Library, under the direction of F. M. Crunden, the librarian. In the same hall was a bound file of every newspaper for 1903, a collection of all books of Missouri authors, loaned by the State Historical Society, Columbia, and a reading room with current publications. A relief map of Missouri, prepared by C. F. Marbut, was on the wall. The mural decorations in the rotunda consisted of four pendentives illustrating the prehistoric, savage, developing and productive eras in the State's history. The prehistoric era was represented by a study of early animal life, the saber-toothed tiger in the wild ruggedness of the original. In the representative of the savage era the Indian was shown in his crude surroundings, preparing a young deer for the meal, while a child looks on. In the next study the Indian gives place to the white man, a scene of early pioneer life on the plains being depicted. The representative of the productive era changed from the realistic of former panels and shows symbolical figures of Abundance, surrounded by cultivated fruits and flowers and by Machinery, Architecture, Science, Literature and Art. The decorations in the dome embodied a historical allegory, tracing the epochs in the development of the middle west. First was shown the heroic figure of LaSalle, the French explorer, with fleur-de-lis banner, taking possession of the territory in the name of Louis XIV. The second group showed France clothed in the tri-color of Napoleon, delivering the keys of possession to America. The next group typified the struggle of colonization in the wild country yet to be made habitable. Concluding group was symbolical of the progressive civilization of peace. In the panel above the mantel in the Governor's reception room the artist brought out strongly the more important details of the shield of the State. The entire building was beautiful in design and execution. It was dedicated June 3, 1904, in the presence of a great and enthusiastic throng, with remarks by prominent Missourians, the principal address being by Governor Dockery, who presided and formally received the building from the president of the Commission, M. T. Davis.

In the Palace of Horticulture, under the superintendency of L. A. Goodman, secretary of the Missouri State Horticultural Society, Missouri held foremost place. The space allotted to Missouri, 6,600 square feet, was larger than that awarded to any other State, and it was filled with representative and choice varieties of Missouri fruits. More than four hundred and thirty varieties of fruits grown in the State were shown from eighty-four counties. The exhibit demonstrated that fruit growing was profitable all over Missouri, that as fine fruit is grown here as anywhere, and that certain kinds of fruit are best suited for certain soils. A train of miniature cars ran on an elevated platform around the exhibit space, the cars being kept filled with fresh fruit in the different seasons, apples, peaches, plums, cherries, berries of every kind. All the fruit grown in the temperate zone was shown. The Missouri space was surrounded by a handsome facade, decorated with appropriate designs.

Department of  
Horticulture.



L. A. GOODMAN.

In the Palace of Agriculture, Missouri held the first rank. H. J. Waters, Dean of the Missouri Agricultural College and Director of the Missouri Agricult-



H. J. WATERS.

ural Experiment Station, was Superintendent. The exhibit of the State's abundant and diversified agricultural resources occupied prominent position at the main entrance of the building and on the main aisle. The central thought of the exhibit was to show the attractiveness of farm life and to demonstrate the wonderful progress of recent years in agriculture. The assembling of the agricultural products was a splendid advertisement of the commonwealth in which they were grown, but underlying the surface suggestive of exploitation was the education in agriculture. In the artistic facade, made as all the decorative features of the display entirely from grain and grasses, was shown a series of thirty pictures, illustrating the marked contrast between the old and the new methods in agriculture. Corn was exhibited in many forms. A corn temple, constructed of the great cereal, was in the main aisle, Missouri being chosen by the Exposition to represent the great corn States. The Louisiana Purchase Monument in corn, two large corn towers and more than one hundred varieties of corn profitably grown in Missouri emphasized the importance

Department of  
Agriculture.

of the cereal. Two great grain pictures, showing a representative Missouri farm, and a 6,000-acre cornfield in Missouri, were among the most notable features of the exhibit. The portrait of Governor A. M. Dockery, made in grain, and figures of two women, an Indian maiden and a modern belle, attracted attention at the main entrance. Agricultural products of all kinds were shown, tastefully arranged, and representing every county in Missouri—a more comprehensive display than was ever made by any State at any exposition.

In the Palace of Mines and Metallurgy, with Dr. G. E. Ladd, Director of the School of Mines, as Superintendent, display was made of the mining resources of the State. Here Missouri's space was at the main entrance. It was surrounded with a neat facade upon which ran a miniature train, representing the six great railroad systems of the State, with cars filled with various mineral products. The exhibit consisted of typical products of Missouri mines and quarries, coal, lead, zinc, iron, copper, tripoli, building and ornamental stone, clays, sands, mineral waters, crystals of all types, mining machinery at work, laboratory specimens and equipment from the School of Mines, photographs of twelve hundred mining views—in brief a comprehensive showing of all the mineral wealth of the State. Every district was represented by adequate specimens and much was put on exhibition as indicating that the enormous mineral resources of Missouri, despite the great yield in the past, have hardly begun to be developed. An outside mining exhibit was made by Missouri in the Mining Gulch where mining machinery was shown at work and a Missouri mine. Special features were a zinc and lead concentrating plant, model of shot tower, illustration of process of making babbitt metal and solder. A Scotch hearth furnace for smelting lead ore was also in operation.



G. E. LADD.

Department of  
Mines and  
Metallurgy.



Department of  
Education.

Missouri was represented in several places in the Palace of Education and Social Economy. Here was made the general exhibit of Missouri schools, under the superintendence of Prof. G. V. Buchanan, of Sedalia, the exhibit of the State University, of Washington University, of St. Louis public schools, of the Agricultural College and Experiment Station and in Social Economy, of different State eleemosynary institutions. The main school exhibit consisted of showings by grades of the work done in the twelve regular grades of the public school and in the kindergarten, of the work of the colleges and normal schools, of the schools for negroes and of special schools. Aside from the high school and grade exhibit these institutions had separate displays: Missouri Valley College, Central Female College, Central College, Howard-Payne College, State Normal School Number 1, at Kirksville, State Normal School Number 2, at Warrensburg, State Normal School Number 3, at Cape Girardeau, Westminster College, Drury College, Central Wesleyan College, Lincoln Institute, Liberty Ladies College, Loretto Academy, Saint Cecelia Seminary, William Jewell College, Christian College, Park College, and Hardin College. The public school exhibit was intended to show the work of the entire system of the State public schools, each grade being represented by photographs of typical children and school scenes and by representative work of the pupils. Over three hundred photographs were shown. Mutoscopes presented in moving pictures scenes upon the school grounds. By means of cabinets, tables and winged frames the exhibits were presented in compact form. Every kind of school, city, town, village and rural, was represented in the exhibit and the work of more than 200,000 children was on exhibition. In the facade appeared illuminated photographs of forty distinguished Missouri educators selected by a committee of Missouri schoolmen. The forty chosen were: W. T. Harris, J. M. Greenwood, W. B. Neely, J. Fairbanks, E. C. Elliot, W. E. Coleman, L. E. Wolfe, John R. Kirk, W. T. Carrington, W. S. Chaplin, R. H. Jesse, J. M. White, C. M. Woodward, R. D. Shannon, Joseph Baldwin, J. C. Jones, M. M. Fisher, F. A. Hall, Miss Susan Blow, L. M. McAfee, J. B. Mitchell, G. B. Morrison, W. H. Black, C. W. Pritchett, Frank Thilly, J. U. Barnard, Mrs. Josephine Heermans, E. A. Allen, G. B. Longan, J. P. Greene, F. Louis Soldan, G. L. Osborne, E. B. Craighead, W. B. Rogers, N. L. Rice, William Thompson, Miss Ophelia Parrish, F. D. Thorp, L. D. Drake, R. C. Norton. A model country school house, 23 by 29 feet in size was shown erected upon the exposition grounds and furnished completely.

Department of  
Social Economy.

The State University exhibit showed what that institution had been and is, and what it is doing. Birdseye views of the University at different periods of its existence and a fine model of the present buildings and grounds were shown. The various departments made exhibits of their work.

In Social Economy was shown the work of the Industrial Training School at Boonville, the School for the Deaf and Dumb at Fulton, the School for the Blind at St. Louis, together with photographs of the Colony for the Feeble Minded at Marshall, the St. Louis Hospital, the Hospital for the Insane at St. Joseph, the work of the Missouri Board of Charities and Correction and other eleemosynary institutions. The work of the Industrial Manual School was shown by an exhibit of the products of the school, wagons, clothing, shoes, bricks and other results of the industry of the boys. In addition to an exhibit along similar lines of the School for the Blind and the School for the Deaf and



G. V. BUCHANAN.

Dumb, showing the pupils' proficiency in industrial training, classes from these schools were at different times shown actually at work in class rooms in the building.

In Live Stock Missouri offered premiums supplementary to those offered by the Louisiana Purchase Exposition Company. Commissioner N. H. Gentry was

Department of  
Live Stock.

in charge of this department. The list of animals for which prizes were offered included cattle, horses, asses, mules, hogs, sheep, goats, all the domestic animals, and the aggregate appropriation for live stock was \$93,000. The plan for the awarding and distributing of cash prizes for Missouri live stock provided: First, for the duplication of all cash prizes won by Missouri animals in competition with the world on horses, jacks and mules, and in all the classes of cattle, hogs, sheep, and goats, as embraced in the official classification of the Louisiana Purchase Exposition. Second, State prizes amounting to \$50,000 upon classification of the chief of the Live Stock Department of the Louisiana Purchase Exposition. Third, the division of such balance of \$85,000 as remained unawarded by the above plan, such remaining sum not to exceed \$20,000, among all worthy animals on



HENRY STEINMESCH.

exhibition in the following proportion: Horses, \$12 per head; cattle, \$10 per head; hogs, \$8 per head; sheep, \$6 per head; goats, \$4 per head.

In Poultry, with Henry Steinmesch, of Kirkwood, as Superintendent, prizes for Missouri poultry of all kinds were offered on the same lines as for other live stock, the total of \$7,000 being set aside for the purpose.

Department of  
Poultry.

The Fish and Game exhibit, located just outside the Forestry, Fish and Game Building, was the only exhibit of live game at the Exposition. Under the superintendence of J. H. Ridgway, it was arranged in cages around a lake, the waters of which were stocked with fish. A commodious hunter's lodge furnished in rustic style with the paraphernalia of the sportsman was conspicuous upon the lake shore. The exhibit showed live deer, wild cat, mountain lion or panther, coyote, gray wolf, red fox, gray fox, opossum, raccoon, beaver, rabbit, fox and gray squirrel, mink, wild turkey, wild geese, wild duck, quail, black wolf, bald eagle, horned owl and four varieties of pheasants, all the varieties of game to be found in Missouri forests. As showing the chief varieties of fish were exhibited rainbow trout, brook trout, large-mouthed black bass, small-mouthed black bass, crapple, channel cat, buffalo, sunfish, perch, eel and carp.



J. H. RIDGWAY.

In the Agricultural Building was shown a model of the St. Joseph stockyards, setting out all the buildings and grounds of that section of St. Joseph. A working model of one of the great packing establishments was exhibited, displaying the actual process of preparing cattle for the market. A wall map pictured St. Joseph's trade territory.

Department of  
Fish and Gam

The Woman's Work exhibit had booths in the Varied Industries Building and the Manufactures Building. In the first were shown specimens of fancy embroideries, laces and needle work by Missouri women. In the second was displayed china painting, pyrography and paintings in oil, water color and pastel, all by Missouri women.

Department of  
Woman's Wor

The Forestry exhibit, located in the Forestry, Fish and Game Building, under the superintendence of Thomas P. Russell, of Cape Girardeau, showed the woods of the State available for commercial use rather than a mere botanical display. More than sixty varieties of Missouri woods were shown. Particularly striking was the furniture of various kinds made from the gum woods of southeast Missouri. Oak, pine, cherry and all the leading woods were shown in finished and unfinished conditions. The exhibit had place near the main entrance to the building and the display of live fish from the Missouri Fish Commission occupied space in connection with the Forestry exhibit.

Department of  
Forestry.



T. P. RUSSELL.

The Forestry exhibit was shown in two booths, one devoted to gum, the second to other Missouri woods. The gum booth showed furniture of black, red and tupelo gum wood. In both booths were shown hand-carved mantels, tables and chairs.

The dairy interests of the State were represented in an exhibit in the Palace of Agriculture with W. W. Marple, of St. Joseph, as superintendent.

Department of  
Dairying.

In this exhibit samples of the butter and cheese produced in Missouri were shown, tastefully arranged.

The Kansas City Casino showed a municipal exhibit attractively arranged in a commodious building erected for that purpose. The Casino consisted of two wings each 24x58 feet and connected by an open court 62x67 feet and located on the Model Street of the Exposition. In the Casino was a relief map showing Kansas City in detail, a map of the United States showing Kansas City's location with reference to the great productive region, railroad map, assembly room, rest rooms, and library.

Kansas City Casino.



W. W. MARPLE.

The Department of Publication, in addition to its exploitation work and the collection, installation, and care of exhibits of Missouri journalism and literature, prepared and

Department of  
Publicity.

published this volume upon The State of Missouri, a summary in words, figures and pictures of the resources of the commonwealth. The first edition of this volume consisted of 80,000 copies upon which the Commission directed the expenditure of \$50,000. The volume was distributed without charge.

As an entirety the exhibit of Missouri made by the Missouri World's Fair Commission represented adequately as directed in the constitutional amendment the "resources, products and industries" of the State. The original act of the General Assembly making provision for Missouri's participation in the Louisiana Purchase Exposition set out that "the great importance to the people of the United States and to the State of Missouri of the event which this exposition is intended to commemorate; the location of said exposition in the said city in the State of Missouri, affording to our citizens opportunities for educational improvement and material benefit of an extraordinary nature, and the valuable opportunities offered by the holding of this Exposition to the people of the commonwealth of Missouri to improve their industrial condition by the exhibition to the world of the boundless resources of this State and thus to add wealth and credit to its standing as one of the commonwealths of the Union, all appeal to our patriotism, sense of duty and self-interest." The display of the greatness of Missouri made by the Missouri World's Fair Commissioners in all departments of the exposition amply justified the appropriation and carried out in fullest measure the provisions of the act.

Adequate repre-  
sentation of  
Missouri.

# INDEX.

	Page		Page
Academies .....	201	Carroll County .....	348
Adjutant General .....	43	Cartersville .....	313
Adair County .....	316	CARTHAGE .....	309
Admission, as State .....	2, 16	Carter County .....	350
AGRICULTURE .....	71	Catholics .....	211
Agriculture, College of .....	114	Cattle, Aberdeen-Angus .....	99, 110
Agriculture, Comparisons .....	4	Cattle, Dairy Breeds .....	112
Agriculture, Persons Engaged in ..	74	Cattle, Galloway .....	111
Agriculture, State Board of .....	45	Cattle, Hereford .....	97, 107, 108, 117, 119
Agriculture, State Exhibit in .....	584	Cattle, Jersey .....	113
Aliens .....	574	Cattle, Missouri Prize Record .....	109
Allison, J. O. ....	581-583	Cattle, Number and Value .....	96, 545
Andrew County .....	318	Cattle, Red Polled .....	113
Animals, Domestic (map) .....	97	Cattle, Sale Records .....	103
Appeals, Kansas City Court of .....	49	Cattle, Short Horn .....	99, 104
Appeals, St. Louis Court of .....	49	Cass County .....	352
Apples .....	126, 132	Cedar County .....	354
Arbitration .....	574	Cement .....	180
Area, Comparisons .....	7	Cemeteries, National .....	546
Art and Artists .....	217	Center of Continent, Missouri as ..	58
Asses and Jennets, Number, Value ..	545	Central College .....	206
Assignments .....	574	Cereals, Six Chief .....	73, 551
Atchison County .....	320	Charities and Correction, Board of ..	47
Attachments .....	574	Chariton County .....	356
Attorney-General .....	42	Charity, Expenditures for .....	554, 555
Auditor .....	38	Cheese Companies .....	140
Audrain County .....	322	Cherries .....	134
Aurora .....	313	Chickens, Number and Value .....	545
Banks .....	5, 157, 159	Chillicothe .....	313
Banking Law .....	48, 155	Christian Bros. College .....	207
Baptists .....	211	Christian County .....	358
Barbers, Board of Examiners for ..	47	Chronology .....	1 to 56
Barley, Acres, Product and Value ..	545	Church and Private Schools .....	208
Barry County .....	324	CHURCH, ART AND PRESS .....	211
Barton County .....	326	Cities, Government of .....	53
Bates County .....	328	Cities of 3,000 and Over, with rank ..	241
Bates, Edward .....	17, 28	CITIES OVER 5,000 .....	313
Beer Inspector .....	46	Cities, Population, 1890 and 1900 ..	241
Bees, Swarms of, Number and Value ..	545	Cities, Population 1,000 to 3,000 ..	242
Benton County .....	330	CITIES, THE GREAT .....	241
Benton, Thos. H. ....	3, 20, 24	Clark County .....	360
Berries .....	133	Clay County .....	362
Bills of Lading .....	575	Clays .....	181
Bills and Notes .....	575	Clarke, George Rogers .....	12
Bill of Rights .....	34	CLIMATE .....	59
Bingham, Geo. C. ....	27	Clinton .....	314
Bland, R. P. ....	15	Clinton County .....	364
Blair, Frank P. ....	8	Clover Seed, Product and Value ..	545
Blair, Montgomery .....	28	Coal, Lead and Zinc, by Counties ..	184
Blind, School for the .....	209	Coal, Production and Prices .....	165 to 167
Bollinger County .....	332	Cobalt .....	179
Bonfoey, B. H. ....	581-583	Cole County .....	366
Boone County .....	334	Colleges, List of .....	201, 208
Boonville, Battle of .....	29	Cooper County .....	368
Boundary Lines .....	546	Columbia .....	314
Brookfield .....	314	Commissioners, World's Fair .....	581, 583
Broom Corn, Acres, Product, Value ..	545	Compromise, First Missouri .....	18
Brown, B. Gratz .....	19	Compromise, Second Missouri .....	20
Buchanan County .....	336	Confederate Army, Soldiers in .....	545
Buchanan, G. V. ....	586	Congregationalists .....	215
Buckwheat, Acres, Product, Value ..	545	Congressional Districts .....	555, 557
Building and Loan Supervision .....	48	Convention, First Constitutional ..	18
Butler County .....	338	Convention of 1860 .....	26
Butter, Amount and Value .....	545	Constitutional Convention of 1865 ..	31
Caldwell County .....	340	Constitutional Amendments .....	34
Callaway County .....	342	Constitution of 1875 .....	33
Camden County .....	344	Copper .....	171, 179
Cape Girardeau County .....	346	Corn, Production of .....	71, 85, 86, 545, 550

	Page		Page
Crawford County .....	370	Farms, Center of .....	550
Creameries .....	139, 144	Farms, Number of .....	74
Crop, Missouri's 1902 .....	545	FAUNA .....	221
Crop Seasons, Extent of .....	77	Federal Army, Soldiers in .....	545
Corporations, Laws of .....	160, 575, 576	Federal Officials in State .....	55
Cotton .....	93, 545	Field, Eugene .....	29
Counties, Naming of .....	561-574	Fish and Game, State Exhibit in .....	587
Counties, Area of .....	315	Fish Commission .....	46
Counties, Organization of .....	561, 574	Fisheries .....	222, 223, 224
Counties, Percentage of Growth of .....	315	Flax, Acres, Product and Value .....	545
Counties, Relative Size of .....	315	Flowers .....	134
County Government .....	51	Forage, Acres, Product and Value .....	545
County Officers .....	43	Forestry, State Exhibit in .....	588
County Officers, Terms of .....	553	Franklin County .....	386
County Seats .....	315	Fruit Experiment Station .....	46, 135
Court, Supreme .....	49	Fruit Trees, Growth of .....	126
Courts, Circuit .....	50	Fund Commissioners, Board of .....	39
Courts, Criminal .....	50	Gamble, Hamilton R. ....	25, 29
Courts, Federal .....	55	Game and Fish Warden .....	46
Courts of Justices of the Peace .....	50	Game Laws .....	228
Courts of Common Pleas .....	50	Garnishment, Law Regarding .....	579
Courts, Probate .....	50	Gasconade County .....	388
Courts, Police .....	50	Gas, Oil and Asphaltum .....	185
Cow Peas, Value of .....	87	Geese, Number and Value .....	545
Cumberland Presbyterians .....	215	Gentry County .....	390
Dade County .....	372	Gentry, N. H. ....	581-583, 587
Dairying, Exhibit of .....	588	Geology and Mines, Bureau of .....	44
Dairy Output .....	138, 140, 143	GEOLOGY AND PHYSIOGRAPHY .....	63
Dairy Association, Missouri State .....	139	Geological Map of Missouri facing .....	64
Dallas County .....	374	German Evangelical .....	216
Dates in History .....	2	Goats .....	124
Davless County .....	376	Gold .....	179
Davis, M. T. ....	581-584	Goodman, L. A. ....	584
Debt, How Liquidated .....	39	Governors, names of .....	548
Deer .....	227	Government .....	33
De Kalb County .....	378	Governor .....	38, 549
De Soto .....	314	Grapes .....	133
Dental Examination, Board of .....	47	Grasses, Clover and Forage .....	87, 88, 91
Dent County .....	380	Greene County .....	392
Disciples or Christian Churches .....	214	Green, James S. ....	13
Distances Between Missouri Towns .....	544	Grundy County .....	394
Divorce, Law Regarding .....	577	HANNIBAL .....	303
Dockery, Governor A. M. ....	581, 585	Hannibal, Shipping Facilities (map) .....	306
Doniphan, A. W. ....	23	Harrison County .....	396
Doniphan's Brigade .....	23	Hawthorne, J. H. ....	581, 583
Douglas County .....	382	Hay, Acres, Product and Value .....	73, 545
Drury College .....	207	Health, State Board of .....	47
Ducks, Number and Value .....	545	Henry County .....	398
Dunklin County .....	384	Historical Society, State .....	45, 135
EDUCATION .....	197	History .....	9 to 32
Education, History of .....	199	Hickory County .....	400
Education, Local Boards of .....	52	Hogs .....	121, 122, 123
Education, State Board of .....	44	Holidays, Public .....	552
Education, State Exhibit in .....	586	Holt County .....	402
Education, Statistics of .....	197, 198	Homes owned .....	3
Eggs, Amount and Value .....	545	Homestead Entries, How Made .....	84
Election, First State .....	20	Honey .....	545, 552
Elections of 1860 .....	25	Horses, Number and Value .....	121, 545
Electric Roads .....	195	Horses, Saddle .....	115, 116, 120
Eleemosynary Institutions .....	48	HORTICULTURE .....	125
Embalming, Board of .....	47	Horticulture, Growth in .....	5, 129, 130, 131
Episcopals, Protestant .....	214	Horticultural Society, State .....	46
Estates, Administration of .....	577	Horticulture, State Exhibit in .....	584
Executive Department .....	37	Howard County .....	404
Exemptions, Law Regarding .....	578	Howell County .....	406
Farm Acreage Improved .....	550	HOW THE COMMONWEALTH IS	
Farm Area, Center of .....	550	GOVERNED .....	33
Farm Buildings, Value of .....	545	Independence .....	313
Farm Income, Gross, Center of .....	551	Industrial Home for Girls .....	209
Farm Lands, Prices of .....	94	Industrial Training School .....	209
Farm Valuations .....	545	Insurance Companies .....	161
Farm Values, Center of .....	550	Insurance Department .....	48

	Page		Page
Interest, Rate of .....	550	Miller County .....	446
Internal Revenue Receipts.....	547	Mines and Metallurgy, Exhibit in..	585
Iron .....	175	Mines, Bureau of .....	47
Iron County .....	408	Mines, School of .....	190
Ironclad Oath .....	32	Mineral Springs .....	188- 190
Jackson, Claiborne F. ....	26	MINING .....	163
Jackson County .....	410	Mining Map of Missouri facing....	176
Jasper County .....	412	Mining, Comparisons .....	5
JEFFERSON CITY .....	307	Mississippi County .....	448
Jefferson City, Why the Capital..	308	MISSOURI AT THE WORLD'S	
Jefferson, Thomas, Monument of...	18	FAIR .....	581
Jefferson County .....	414	Missourians, Greatest .....	8
Johnson County .....	416	Missouri, Relief map of .....	70
JOPLIN .....	293	Missouri Valley College .....	208
Judicial Circuits by Counties 54, 559,	561	Moberly .....	313
Judiciary .....	48	Moniteau County .....	450
KANSAS CITY .....	263	Monroe County .....	452
Kansas City, Exhibit of.....	588	Montgomery County .....	454
Kaolin .....	182	Morgan County .....	456
Kirksville .....	313	Mortgages, Chattel .....	575
Knox County .....	418	Mortgage Deeds .....	580
Labor Bureau .....	46	Moss, F. J. ....	581- 584
Labor Statistics .....	5	Mules .....	120, 545
Laclede County .....	420	National Guard .....	43, 546
Ladd, G. E. ....	585	Negroes, Education of .....	203
Lafayette County .....	422	Nevada .....	313
Land Districts .....	55	New Madrid County .....	458
Land Surface .....	545	Newspapers .....	220
Lands, Government .....	83	Newton County .....	460
Law, How Licensed to Practice....	47	Nickel .....	179
Lawrence County .....	424	Nodaway County .....	462
Laws .....	574	Notaries Public .....	51
Lead Production .....	168, 170	Nursery Interests .....	134
Legislature .....	34, 35, 37	Oats, Acres, Product and Value 545,	550
Lewis County .....	426	Orchards, Value of .....	134
Library Board, State .....	44	Oregon County .....	464
Library, Exhibit of .....	584	Osage County .....	466
Liens, Law Regarding .....	579	Osteopathic Registration, Board of.	47
Lime .....	180	Ozark County .....	468
Limitations, Law Regarding .....	579	Ozark Region .....	64
Lincoln County .....	428	Park College .....	207
Linn County .....	430	Parker, L. F. ....	581- 583
Literature .....	220	Peaches .....	128, 133
LIVE STOCK .....	95	Pemiscot County .....	470
Live Stock and Products .....	4, 545	Penitentiary .....	48
Live Stock, State Exhibit in.....	587	Pensioners, Federal .....	547
Livingston County .....	432	Perry County .....	472
Louisiana .....	314	Petroleum, Inspectors of .....	46
Louisiana Purchase .....	14	Pettis County .....	474
Lutherans .....	215	Pharmacy, Board of .....	47
Lyon, General N. ....	27	Phelps County .....	476
Macon County .....	436	Phelps, John S. ....	11
Madison County .....	438	Physiographic Regions, (map)....	67
MANUFACTURES AND COM-		Pike County .....	478
MERCE .....	147	PLANT LIFE .....	229
Manufactures, Growth in.....	148, 154	Plants, Number of .....	240
Manufactures of 25 Cities.....	155	Plate Glass .....	180
Maries County .....	440	Platte County .....	480
Marion County .....	442	Platte Purchase .....	22
Marple, W. W. ....	588	Political Divisions .....	6
Marriage Law .....	580	Polk County .....	482
Marshall .....	314	Population, Density of .....	549, 551
Marshall, W. H. ....	581- 583	Population, Divisions .....	549
Marvin, E. M., Bishop .....	31	Population, Female .....	549
McDonald County .....	434	Population, Foreign .....	3
McDougall, H. C. ....	581	Population, Growth of .....	547, 549
Mediation and Arbitration, Board of	47	Population, Male .....	549
Mercer County .....	444	Population, Negro .....	6, 20
Methodists .....	213	Population, of Militia Age .....	549
Mexican War, Soldiers in.....	546	Population, School Age .....	549
Mexico .....	314	Population, Urban and Rural.....	551
Milk, Amount and Value .....	545	Population, Voting .....	549



55  
55  
55  
55  
55  
0, 545  
41  
545  
40  
41  
47  
1, 62  
15  
525  
2, 545  
15  
191  
192  
39  
38  
314  
180  
545  
65  
41  
1, 545  
230  
530  
552  
34, 580  
532  
2  
534  
205  
75, 93  
67, 127  
585  
545  
538  
56  
311  
538  
552  
205  
86, 545, 552  
545  
545  
545  
545  
garding, 545  
arg, 585, 545  
ibit at, 545  
545  
545  
Prices, 168, 175











